



Corridor Program

Congestion Relief & Bus Rapid Transit Projects

APPENDIX E5

**I-405, SR520 to SR522 Kirkland Nickel
Finding of No Significant Impact
(April 2005)**

**I-405, SR520 to SR522 Stage 1
(Kirkland Stage 1)**

**Request For Proposal
July 15, 2005**



**Washington State
Department of Transportation**

I-405, SR 520 to SR 522 - Kirkland Nickel Project

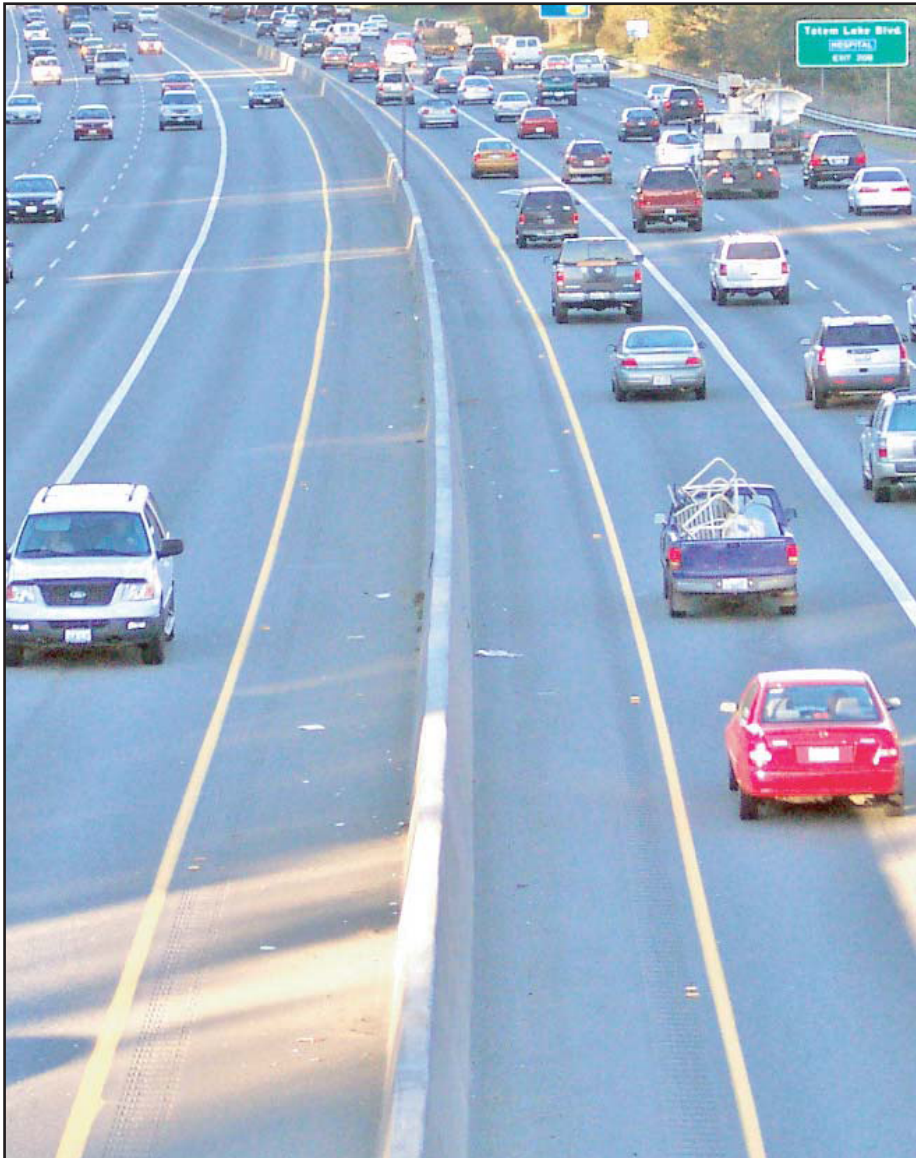


Corridor Program

Congestion Relief & Bus Rapid Transit Projects

Finding of No Significant Impact

April 2005



Washington State
Department of Transportation



U.S. Department of Transportation
Federal Highway Administration

I-405, SR 520 to SR 522 – Kirkland Nickel Project

Kirkland, Bothell, and King County, Washington

Finding of No Significant Impact

By the

U.S. Department of Transportation

Federal Highway Administration

The Federal Highway Administration (FHWA) has determined, in accordance with 23 CFR 771.121, that the proposed project will have no significant impact on the environment.

This Finding of No Significant Impact (FONSI) is based on the Environmental Assessment (EA) (incorporated by reference) and other documents and attachments as itemized in this FONSI. These documents have been independently evaluated by the FHWA and determined to accurately discuss the project purpose, need, environmental issues, impacts of the proposed project, and appropriate mitigation measures. It provides sufficient evidence and analysis for determining that an environmental impact statement (EIS) is not required.

FHWA takes full responsibility for the accuracy, scope, and content of the EA, as modified by this FONSI and the referenced documents.

4/14/05

Date of Approval

James J. Leonard
For FHWA



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Acronyms

Acronym or Abbreviation	Meaning
ACM	Asbestos-containing materials
BMPs	best management practices
BRT	bus rapid transit
CC	correspondence comment
CFR	Code of Federal Regulations
CSS	context sensitive solutions
dBA	decibels in the A-weighted scale to show relative loudness of sound
DNS	Determination of Nonsignificance
EA	environmental assessment
EIS	environmental impact statement
FEIS	final environmental impact statement
FHWA	Federal Highway Administration
FONSI	Finding of No Significant Impact
LBP	lead-based paint
Leq	equivalent sound pressure level
NAC	FHWA Noise Abatement Criteria
NEPA	National Environmental Policy Act
NOAA Fisheries	National Oceanic and Atmospheric Administration Fisheries
OAHP	Office of Archaeological and Historic Preservation
OC	oral comment

Acronym or Abbreviation	Meaning
OHWL	ordinary high water line
ppm	parts per million
SEPA	State Environmental Policy Act
SPCC	spill prevention control and countermeasure plan
SR	State Route
TDA	threshold discharge area
TESC	temporary erosion and sediment control
TMP	Transportation Management Plan
TT	transcript testimony
USDOT	US Department of Transportation
USFWS	US Fish and Wildlife Service
UST	underground storage tank
WAC	Washington Administrative Code
WC	written comment
WDFW	Washington Department of Fish and Wildlife
WRIA	water resource inventory area
WSDOT	Washington State Department of Transportation

DESCRIPTION OF PROPOSED ACTION

The Federal Highway Administration (FHWA) and the Washington State Department of Transportation (WSDOT) issued an Environmental Assessment (EA) on February 23, 2005. It provides for improvements on Interstate 405 (I-405) from SR 520 to SR 522. These improvements are a part of the I-405 Corridor Program. The Proposed Action includes the following improvements to support construction and operation of the facility:

- A northbound general-purpose lane will be constructed from the I-405/NE 70th Street interchange to the I-405/NE 124th Street interchange;
- A southbound general-purpose lane will be constructed from the I-405/SR 522 interchange to the I-405/SR 520 interchange; and
- The I-405/NE 116th Street interchange will be reconstructed, realigned, and reconfigured.

Other features of the project include:

- Interchange-related improvements will be made to NE 85th Street and NE 116th Street;
- Stormwater management facilities will be constructed to provide water quality treatment and detention and conveyance system upgrades;
- Context Sensitive Solutions (CSS) will be implemented during the project to incorporate the elements of mobility, safety, environment, and aesthetics throughout the project; and
- Measures will be implemented that will avoid or minimize effects to the environment.

These improvements are shown in Figure 4-2 of the EA.

The preliminary cost estimate for the I-405, SR 520 to SR 522 – Kirkland Nickel Project is \$121.5 million for construction and \$22.5 million to acquire right of way (in 2004 dollars). This cost estimate assumes that the project will be completed on its scheduled opening date of 2011 by using a design-build contracting mechanism. Design-build contracting generally results in a substantially shortened final engineering design and construction period, but may result in increased project costs.

EA COORDINATION AND COMMENTS

WSDOT team members held a public hearing on March 15, 2005, following issuance of the EA on February 23, 2005. The EA hearing took place at the City of Kirkland Maintenance Center in Kirkland, Washington, where we requested verbal comments be provided to a court reporter, written comments be provided on comment forms, or follow-up written comments submitted to the I-405 Project Office by March 25, 2005. The Notice of Availability of the EA and Notice of EA Hearing were advertised in the following newspaper on the date shown:

King County Journal on February 22, 2005

Display advertisements were placed in the following newspapers on the dates shown:

Bothell/Kenmore Reporter on March 2, 2005

El Mundo (in Spanish) on March 3, 2005

King County Journal on March 4, 2005

Kirkland Courier in the March 2005 issue

Northwest Asian Weekly on March 3, 2005

Russian World in the March 2005 issue

The Skanner on March 2, 2005

We sent a total of 2,669 postcards announcing the availability of the EA to the following recipients, inviting them to the public hearing and to comment on the EA document:

- residents and property owners within 500 feet of I-405 in the project area;
- individuals who provided comments during scoping;
- Section 8 (Section 8, or the Housing Choice Voucher Program, is a Federal housing program which provides housing assistance to low-income renters and homeowners. This assistance comes in the form of rental subsidies, limiting the monthly rent payment of the assistance recipient) housing residents in the project area;
- individuals and agencies that commented on the I-405 Corridor Program Final Environmental Impact Statement (FEIS);
- the Kirkland Advisory Committee;
- Executive and Steering Committee members and their alternates; and
- individuals on various mailing lists developed during the I-405 Corridor Program.

Additionally, we provided the Notice of Availability and the EA document directly to the following agencies and citizens:

- Elected officials, tribes, and city administrators for jurisdiction within the project area, the Kirkland Advisory and Technical Advisory Committee members, and North Corridor Advisory Committee members;
- Regulatory agencies, cooperating agencies, and all other agencies that have expressed interest in the project;
- Public and private libraries in proximity to the project;
- Individuals that participated as commenters in the Kirkland Nickel Project Scoping Report; and

In total, approximately 3,400 individuals and agencies received the Notice of Availability.

Approximately 42 people attended the public hearing. Four people offered verbal comments, which were recorded in the Hearing Transcript (Attachment 7). Six additional individuals made comments to project staff at the public hearing and an additional six submitted comments on forms provided at the public meeting (Attachment 6). During the comment period, eight individuals and/or agencies also provided written comments on the EA (Attachment 5). The comments focused primarily on traffic noise, noise wall construction, fisheries resources, and water quality issues.

DETERMINATION AND FINDINGS

National Environmental Policy Act (NEPA) Finding

The Federal Highway Administration (FHWA) served as lead agency under NEPA for the project. The Washington State Department of Transportation (WSDOT) prepared an Environmental Assessment (EA) in compliance with NEPA, 42 USC Section 4321 et. seq., and with FHWA's regulations, 23 CFR Part 771. The EA discusses the potential impacts of the project so that FHWA can determine whether significant adverse impacts (CEQ 1508.27) are probable. If such a determination were made, an Environmental Impact Statement (EIS) would need to be prepared.

WSDOT has incorporated environmental considerations into its study of project alternatives and has conducted evaluations of the project's potential environmental impacts. FHWA and WSDOT reviewed the EA prior to issue in February 2005. The EA found that the project's construction and operation will cause no significant adverse environmental effects that will not be mitigated. This finding applies to all applicable environmental elements.

After carefully considering the EA, its supporting documents, and the public comments and responses, FHWA finds under 23 CFR 771.121 that the proposed project, with the mitigation to which WSDOT has committed, will have no significant adverse impacts on the environment. The record provides sufficient evidence and analysis for determining that an EIS is not required.

Air Quality Conformity Statement

The Puget Sound Regional Council has modeled the effects of this project on regional ozone and carbon monoxide emissions. This project, as well as all others in the Council's Transportation Improvement Program and Metropolitan Transportation Plan, conform to the State Implementation Plan at the regional level. The Environmental Protection Agency has approved the current State Implementation Plan for this area. The FHWA has approved the Council's Transportation Improvement Program conformity analysis. At the project level, hot-spot carbon monoxide modeling demonstrates that carbon monoxide concentrations will not exceed the National Ambient Air Quality Standards of 35 parts per million (ppm) averaged over one hour or 9 ppm averaged over eight hours in the year of opening or the design year. This project conforms to the State Implementation Plan and both federal and state Clean Air Act requirements.

Floodplain Finding

There are no Federal Emergency Management Agency floodplains within the immediate project area. Stormwater will be detained for half of the two-year through 50-year storm events prior to discharge to downstream waterbodies including Yarrow Creek, Forbes Creek, Juanita Creek, and the Sammamish River. FHWA finds that no adverse impacts to any 100-year floodplains or floodways will occur as a result of the proposed project.

Endangered Species Act (ESA) Finding

WSDOT served as the lead for the ESA Section 7 consultation on behalf of FHWA pursuant to 50 CFR 402.07. The National Marine Fisheries Service (NOAA Fisheries) and the US Fish and Wildlife Service (USFWS), the agencies responsible for administering the ESA, were contacted early in the project. The listings for threatened and endangered species are current within the last 180 days as a result of the review of the NOAA Fisheries Web site and telephone consultation with the USFWS.

Federally-listed threatened and endangered species that occur within the project vicinity include wintering bald eagles (federal threatened), bull trout (federal threatened), and Chinook salmon (federal threatened). Coho salmon (federal candidate) is the only federally-proposed or candidate species that occurs within the immediate project area. A Biological Assessment was submitted in August 2004 to NOAA Fisheries and the USFWS, which concluded that:

- the Proposed Action will “not affect” bald eagles; and
- the Proposed Action “may affect, but is not likely to adversely affect” Puget Sound Chinook and bull trout.

Section 7 Concurrence on the Biological Assessment was obtained from NOAA Fisheries on October 28, 2004, and from USFWS on October 25, 2004. The FHWA, USFWS, and NOAA Fisheries concur that the project “may affect, but is not likely to adversely affect” Puget Sound Chinook salmon, and coastal bull trout, and will “not affect” bald eagles.

Magnuson-Stevens Act Finding

Based on investigations and analysis of the types of fisheries habitat that could be affected by potential future discharge of stormwater into Lake Washington or discharge that could occur during construction, NOAA Fisheries also concluded that the Proposed Action will minimize or offset adverse effects on essential fish habitat and further conservation measures will not be required.

Farmland Finding

Suitable soils and active farming do not occur within the project corridor. The Proposed Action will cause no long-term or construction adverse impacts on agricultural lands. The project will be consistent with the Farmlands Protection Policy Act of 1981 (7 USC 4201-4209) and other applicable state and federal farmlands protection policies, orders, and guidance.

Wetland Finding

The proposed project will permanently impact 14 wetlands. Thirteen of the impacted wetlands are along the right of way and could not be avoided due to roadway design standards or the need to properly construct noise walls. The fourteenth wetland is located near the toe of a steep slope and will be displaced by a detention pond. In total, 1.6 acres

of wetlands will be directly impacted. Thirteen of the 14 impacted wetlands can be characterized as lower-quality wetlands, typically associated with ditches alongside the road. The remaining wetland can be characterized as medium-quality, which provides minimal water quality improvement and habitat value.

Several measures were taken during design to avoid or minimize impacts to wetlands, including adjustment of the project footprint and incorporation of bridge wingwalls and retaining walls. Despite WSDOT's efforts to avoid wetlands during construction, 0.18 acres of wetlands will be temporarily disturbed, which the contractor will be required to restore.

Three sites, identified in Exhibit 5-40 in the EA will be used to provide the required wetland mitigation to replace the filled wetlands. Detailed information on mitigation goals, site configuration, restoration, and monitoring will be provided in a *Wetland Mitigation Plan* currently being prepared. This plan will be part of the application to the U.S. Army Corps of Engineers to fill wetlands after this Finding of No Significant Impact (FONSI) is issued.

The FHWA finds that there is no practicable alternative to the proposed new construction within wetlands. The Proposed Action includes all practicable measures to reduce harm to wetlands that may result from the Proposed Action.

Section 106 Finding

Archival review, tribal consultation, and field surveys identified no evidence of cultural resources within the project site. As part of early coordination with the tribes in preparation of the cultural resources assessment, contacts (written and by telephone) were made with the Duwamish, Snoqualmie, Muckleshoot, Tulalip, Yakama, and Suquamish tribes. No Section 106 Resource concerns were noted.

In addition to consultation with potentially-affected Tribes, coordination and consultation with the Washington State Office of Archaeology and Historic Preservation (OAHP) under Section 106 of the National Historic Preservation Act were initiated. In February of 2005, a letter was sent to WSDOT from OAHP that included a finding of "no adverse effect" to historic and cultural resources as a result of the proposed project.

Consultation with the OAHP determined that one structure within the Area of Potential Effects is eligible for listing on the National Register of Historic Places. The consultation concluded that the Proposed Action will have no adverse effects on historic properties.

Cultural resource investigations determined that the Proposed Action has a low probability for hunter-fisher-gatherer, ethnographic period, historic Indian, and historic period non-Indian archaeological resources. In a February 10, 2005, letter to OAHP, WSDOT noted that some of the wetland mitigation sites were inundated or otherwise inaccessible for intensive field investigation and recommended monitoring during construction. A professional archaeologist will monitor construction excavation activities identified in the EA as the East Forbes Lake, West Forbes Lake, and Thrashers Regional wetland mitigation sites.

Based on the cultural resources analysis and coordination with the tribes and OAHP, FHWA finds that the project will have no adverse effect on any identified or likely cultural or historic resources, and that the Section 106 coordination requirements for this project have been fulfilled.

Section 4(f) Findings

The existence of potential U.S. Department of Transportation (USDOT) Act of 1966 Section 4(f) resources was evaluated as part of the EA.

The Proposed Action will have no adverse effects on historic properties. The Proposed Action will not result in use of the one property (the George Shaw house) within the Area of Potential Effects that is eligible for listing in the National Register of Historic Places; therefore, 4(f) protection is not afforded to this property. It should be noted that a second property within the Area of Potential Effects was identified as eligible for listing; however, the structure on that property was demolished by the owner for future development.

No park properties will be acquired for the project; no activities, features, attributes, or uses of parks will be changed by the project.

FHWA finds that the proposed project will not use or significantly impact any historical resource, park, or recreational resource protected by Section 4(f) of the USDOT Act of 1966.

Environmental Justice Finding

Data from the 2000 U.S. Census indicate that approximately 19.0 percent of the population in the census block groups comprising the project area is minorities, and approximately 4.9 percent of the population is low income.

Overall, there will be few long-term adverse impacts from operation of the Proposed Action. Property acquisition for the Proposed Action will not adversely affect minority or low-income populations. No exceedances of the National Ambient Air Quality Standards for carbon monoxide will occur. Stormwater treatment included in the Proposed Action will decrease pollutant releases relative to existing conditions. No impacts to wildlife are anticipated, and substantial wetland loss is unlikely to occur. The project area's existing visual character will change slightly as a result of pavement widening and new noise walls.

With the Build Alternative, modeling indicates that without the recommended noise barriers, noise levels will approach or exceed the FHWA Noise Abatement Criteria (NAC) at 38 modeled locations, representing an equivalent of 365 residences. Noise levels at 25 of these 38 sites currently approach or exceed the FHWA criteria. With the noise abatement measures proposed, noise levels at 21 modeled sites, representing an equivalent of 171 residences, will continue to approach or exceed the criteria. There will be no severe noise effects.

Under the No Build Alternative, noise levels will approach or exceed the FHWA NAC at 26 of the 110 modeled sites. These 26 sites represent an equivalent of 291 residential units.

Noise barriers were determined to be feasible and reasonable in nine areas that were evaluated for mitigation. The recommended noise barriers will reduce traffic noise levels at 22 modeled receptors, representing an equivalency of 240 residences. Three of these benefited modeled receptors will continue to experience noise levels that approach or exceed the NAC even after noise barriers are built. With the noise barriers, traffic noise levels will be reduced to a level that is below the NAC at an equivalent of 194 residences that would otherwise approach or exceed the criteria. All residences are considered equally under the WSDOT noise abatement policy, independent of their minority or low-income status.

FHWA finds that the construction and operation of the Proposed Action will not have a disproportionately high and adverse effect on minority or low-income populations in the project area. Project design and mitigation measures will assure that adverse impacts will not occur or will be minimized. Upon completion of the Proposed Action, mobility improvements along I-405 for passenger vehicles and public transit will benefit local residents, including minority and low-income populations.

ATTACHMENTS

The EA and the EA hearing transcript are incorporated by reference into this FONSI. Copies of these documents are available upon request from Allison Ray, WSDOT I-405 Project Office, 600 108th Avenue NE, Suite 405, Bellevue, WA 98005; telephone (425) 456-8610.

The following attachments are incorporated into this FONSI:

Attachment 1: Errata to EA

Attachment 2: Notice of Availability of FONSI and SEPA Determination of Nonsignificance

Attachment 3: FONSI Distribution List

Attachment 4: Mitigation Commitment List

Attachment 5: Written Comments with Responses

Attachment 6: Public Hearing Comments with Responses

Attachment 7: Hearing Transcript with Responses

Attachment 1

Errata to EA

The following corrections apply to the EA and accompanying discipline reports for the I-405, SR 520 to SR 522 – Kirkland Nickel Project, which was issued on February 23, 2005. These corrections serve to clarify or enhance readability of the EA. Because these changes to the EA neither alter the analysis nor the conclusion of No Significant Impact, the issuance of a revised EA is not required. Changes to the EA text are identified by the corresponding page number in the EA. These minor revisions are incorporated into the EA by reference.

Environmental Assessment (EA)

Page 1-1, line 3, “I-405 Corridor Program.”

This has been changed to read “I-405 Corridor Congestion Relief and Bus Rapid Transit Program.”

Page 2-2, a sentence has been added to the end of the second paragraph.

“There will also be a greater demand for other modes of transportation.”

Page 3-3, paragraph entitled “What is the No Build Alternative?” in the third sentence.

Delete the word “meaningfully.”

Page 4-6, Exhibit 4-2, Sheets 1 through 11, Major Project Features.

The designation for new impervious surface (bright yellow) was inadvertently omitted from the legend of the Exhibit.

Pages 4-6 through 4-18 include the designation for new impervious surface in the legend.

Page 4-23, second paragraph.

The paragraph is revised as follows:

“Overall, the project will add 16.05 acres of net new impervious surface. In addition to providing enhanced treatment for the new pavement areas, 35.68 acres of presently untreated impervious surface will be retrofitted for enhanced water quality treatment. In total, the Kirkland Nickel Project will treat 51.73 acres of new impervious surface, or 322 percent of the new impervious surfaces created by the project (Exhibit 4-5).”

Page 4-23, Exhibit 4-5: Summary of Runoff Treatment by Watershed.

Exhibit 4-5 has been changed to reflect the revised data as shown below:

Exhibit 4-5: Summary of Runoff Treatment by Watershed

Watershed	Existing Impervious Surface Area¹ (acres)	New Impervious Area (acres)	Impervious Area Treated (acres)	Percent of New Impervious Area Treated
Lake Washington North/Bellevue East	122.55	1.87	6.49	347%
Forbes Creek	26.17	9.61	12.47	130%
Juanita Creek	82.60	3.55	17.31	488%
Sammamish River	31.81	1.02	15.46	1,516%
Project Total	263.13	16.05	51.73	322%

¹ Includes I-405, interchanges, and some surface streets where construction will occur

Page 4-25, at the end of third paragraph.

The following statement has been added:

“The North Corridor Advisory Committee also continues to provide suggestions for project refinements.”

Page 5.1-1, second paragraph.

“King County Metro” has been changed to read “King County.”

Page 5.1-2, paragraph entitled “Today” in the first sentence

Change “700 to 1,000” to read “690 to 1,050.”

Page 5.1-5, second sentence is revised to read:

“For example, with improvements, southbound I-405 volumes in the general-purpose lanes during the morning peak will be 870 to 1,040 vehicles greater and average vehicle speed more than 15 miles per hour higher than for the 2014 No Build Alternative.”

Page 5.4-10, Exhibit 5-17: Property Acquisitions and Easements, the last three lines have been revised to read as follows:

22	Wetland Mitigation ¹ (East Forbes Lake)	Wooded	215,819		215,819 ²
23	Wetland Mitigation ¹ (West Forbes Lake)	Lawn	136,495	136,495	
24 and 25	Wetland Mitigation ¹ (Thrashers Regional Park)	Wooded	202,118	202,118	

Page 5.9-4, first sentence.

The sentence is replaced with the following:

“These facilities will provide enhanced treatment for the proposed 16.05 acres of new impervious surfaces and 35.68 acres (approximately 13.6 percent of existing impervious surfaces within this portion of I-405) of presently untreated impervious surfaces (Exhibit 5-30).”

Page 5.10-1, fourth paragraph reads, “There are several wetlands located in the project area.”

This statement has been changed to read as follows:

“There are thirty-three wetlands located in the project area.”

Page 5.10-1, sidebar paragraph.

The sidebar language is replaced with the following:

“Both state and local resource agencies rate or categorize wetlands according to their relative rarity or importance. Wetlands are differentiated based on their sensitivity to disturbance, their significance, their rarity, our ability to replace them, and the beneficial functions they provide to society.”

Page 5.10-3, second paragraph.

The referenced paragraph is revised as follows:

“Because of a long history of disturbance from past roadway construction and other development, wetland quality in the I-405 Corridor has been degraded from what would be expected under a natural condition. Twelve of the 14 affected wetlands in the Kirkland Nickel Project area can be characterized as lower-functioning wetlands. Lower-functioning wetlands are typically associated with ditches alongside the road. The remaining wetlands can be characterized as moderate-functioning wetlands. These wetlands provide some water quality improvement and habitat value, but do not provide a

high level of benefits to society. Exhibits 5-36 and 5-37 are examples of these types of wetlands. The larger medium- or high-valued wetlands, which provide more habitat functions, are usually more natural, occur outside the WSDOT right of way, and will not be affected.”

Page 5.10-3, fifth paragraph.

The paragraph is combined with the preceding paragraph and revised as follows:

“When the I-405 roadway is widened, wetlands totaling 1.6 acres will be permanently filled. The majority of these wetlands is located adjacent to the roadway and are lower-valued wetlands that were ditched or otherwise disturbed during the original construction of I-405. Water from these wetlands typically flows into culverts that extend beneath I-405 or adjacent roads, or into storm drains.”

The discussion of time frames has been removed. The sentence is revised to read, “However, temporary effects can result in a short-term loss of wetland functions following construction.”

Page 5.10-6, first paragraph.

The section is revised as follows:

“The Kirkland Nickel Project mitigation strategy includes coordination with local governments to select projects that meet federal, state, and local regulatory requirements and that would provide substantially greater functions and values than the affected wetland. The mitigation strategy must satisfy all requirements of each federal, state, and local jurisdiction to compensate for the respective loss of wetlands within the Kirkland Nickel Project area (Exhibit 5-39). WSDOT has worked with the federal, state, and local agencies (including the cities of Kirkland and Bothell, as well as King County) to coordinate activities to avoid or minimize effects to wetlands within their respective jurisdictions.

Despite WSDOT’s efforts to avoid wetlands during construction, 0.18 acres of wetlands will be temporarily disturbed, which the contractor will be required to restore. An additional 1.6 acres of wetlands will be permanently filled. The acreage of filled wetlands is distributed among local jurisdictions accordingly:

- Kirkland – 1.229 acres
- Bothell – 0.136 acres
- Unincorporated King County – 0.235 acres

Three sites (Exhibit 5-40) will be used to provide the required wetland mitigation to replace filled wetlands. These sites provide adequate area according to replacement ratios of each federal, state, and local jurisdiction to fully mitigate for the filled wetlands.”

Page 6-11, first paragraph, states that there are 1.832 acres of wetland that will be permanently filled, and 0.19 acres temporarily affected. This statement conflicts with Chapter 5.10, page 5-6, sixth paragraph, which states that there will be 1.6 acres permanently filled and 0.18 acres temporarily affected.

The text on page 6-11, starting with the first complete sentence, has been changed to read as follows:

“Approximately 0.18 acres of wetlands will be temporarily affected because of construction activities and approximately 1.6 acres of wetlands will be filled (Exhibit 6-3). The distribution of permanently filled wetlands by watershed will be Forbes Creek – 1.064 acres, Lake Washington East/Bellevue North – 0.096 acres, Juanita Creek – 0.304 acres, and Sammamish River – 0.136 acres.

Based on the mitigation that will occur to compensate for the loss of 1.6 acres, a positive contribution to cumulative effects (more wetlands created or enhanced than filled or permanently impacted) to wetlands within the affected areas can be realized as a result of the construction of the Kirkland Nickel Project.”

Page 6-13, fourth paragraph, second sentence.

The sentence is replaced with the following:

“The greatest benefits will be gained through maintenance of the enhanced treatment for the new pavement areas and the retrofitted treatment of the 35.68 acres where previous runoff was not treated.”

Appendix E, pages E-1 through E-12.

The text in this appendix has been revised in its entirety to read as printed in Attachment 4 of this FONSI.

Noise Discipline Report

Page 3-59, Figure 8, Sheets 1 through 7, noise wall alphanumerical designations in the Noise Discipline Report are different from those in the EA. The following table provides a cross references between the Noise Discipline Report and Figure 8:

Designation in the Environmental Assessment	Designation on Figure 8 in the Noise Discipline Report
NW1	N7
NW2	R3
NW3	N5
NW4	N3
NW5	R2
NW6	U4
NW7	N2
NW8	N1
NW9	R1

Page 3-60, Figure 8, sheet 2 of 7

The receptor between receptors 19 and 21 has been relabeled as receptor 20

Page 5-7, Table 5-2 has been revised to include three modeled noise receptors as follows:

Table 5-2: Future Noise Levels (Leq in dBA) for Modeled Only Sites						
Modeled Noise Receptor	Activity Category	Numbers by Activity ¹	Noise Abatement Criteria (dBA)	Modeled Existing Noise Level (dBA Leq(h)) ³	Future Noise Levels (dBA) by Project Alternative without Abatement ²	
					2030 No Build	2030 Build
Y	B	6 SF	67	64	65	65
ZA	B	16 MF	67	69	71	72
ZB	B	6 SF	67	64	65	65

¹ SF=Single Family Residence; MF=Multiple Family Residence

² Values in BOLD approach or exceed the NAC.

³ The equivalent steady-state sound level in A-weighted decibels for a stated period of time, which contains the same acoustic energy as the actual time-varying sound level for the same period of time.

In addition, the 2030 Build dBA for noise receptor ZE in Table 5-2 of the Noise Discipline Report is revised from 64 to 65.

Page 6-25, Table 6-21 has been revised as shown below:

Table 6-21: Noise Wall Recommendations and Benefits

Wall Area	Recommended Height	Benefits			
		Receptor	Residential Equivalent (RE)	L _{eq} (h) with Wall	Reduction (dBA)
NW7	20 feet	30	5	63	7
NW7		31	2	63	13
NW9	12 feet	F	7	59	12
NW5	16 feet	P	4	64	5

Fish and Aquatic Habitat and Supplemental Stream Habitat Survey Discipline Report

Page 4-9, Second paragraph:

The first word in the paragraph, “Extensive”, is deleted.

Attachment 2

Notice of Availability of FONSI and SEPA Determination of Nonsignificance

This attachment provides the notices prepared for the FONSI and the Determination of Nonsignificance (DNS) prepared under State Environmental Policy Act (SEPA) Rules along with information on publication of these notices.

NOTICE OF AVAILABILITY OF FINDING OF NO SIGNIFICANT IMPACT, I-405, SR 520 TO SR 522 – KIRKLAND NICKEL PROJECT

The Federal Highway Administration issued the I-405, SR 520 to SR 522 – Kirkland Nickel Project Finding of No Significant Impact on April 14, 2005.

This finding is based on the evaluation of the Environmental Assessment as issued on February 23, 2005, and public and agency input at the public hearing on March 15, 2005.

Description of Proposed Project:

The FHWA and WSDOT issued an Environmental Assessment on February 23, 2005. It provides for improvements on Interstate 405 from SR 520 to SR 522. These improvements are a part of the I-405 Corridor Program. The Proposed Action includes the following improvements to support construction and operation of the facility:

- A northbound general-purpose lane will be constructed from the I-405/NE 70th Street interchange to the I-405/NE 124th Street interchange;
- A southbound general-purpose lane will be constructed from the I-405/SR 522 interchange to the I-405/SR 520 interchange; and
- The I-405/NE 116th Street interchange will be reconstructed, realigned, and reconfigured.

Other features of the project include:

- Interchange-related improvements will be made to NE 85th Street and NE 116th Street;
- Stormwater management facilities will be constructed to provide water quality treatment and detention and conveyance system upgrades;
- Context Sensitive Solutions will be implemented during the project to incorporate the elements of mobility, safety, environment, and aesthetics throughout the project; and
- Measures will be implemented that will avoid or minimize effects to the environment.

Where Can I View the Environmental Assessment and FONSI?

Copies of the I-405, SR 520 to SR 522 – Kirkland Nickel Project Environmental Assessment and the FONSI will be available for a cost of \$100.00 for both, which does not exceed the cost of printing. Project information may also be reviewed and/or copied, at the WSDOT address above. It is available for review online at www.wsdot.wa.gov/projects/I-405/Kirkland, at the WSDOT I-405 Project Office, 600 108th Avenue, NE, Suite 405, Bellevue, and the U.S. Department of Transportation, Federal Highway Administration, 711 South Capitol Way, Suite 501, Olympia. It is also available at the following public libraries:

- Bellevue Community College
- Bellevue Regional Library
- Bothell Regional Library
- Kirkland Library
- Mercer Island Library
- Newport Way Library
- University of Washington Libraries
- University of Washington, Bothell
- Woodinville Library

Who Can I Call with Questions?

Please call Allison Ray, WSDOT I-405 Project Office, 600 108th Avenue NE, Suite 405, Bellevue, WA 98005; telephone (425) 456-8610 if you have any questions or comments.

Usted puede pedir estos materiales escritos en español o solicitar un interprete llamando a Jose Rivera at (360) 705-7098.

Individuals requiring reasonable accommodations may request written materials in alternative formats, sign language interpreters and physical accessibility accommodations by calling (360) 705-7097. Persons who are deaf or hard of hearing, please call the Washington State Telecommunications Relay Service, or Tele-Braille at 7-1-1, Voice 1 (800) 833-6384, and ask to be connected to (360) 705-7097.

The FHWA and WSDOT ensure full compliance with Title VI of the Civil Rights Act of 1964, the Civil Rights Restoration Act of 1987, and related statutes by prohibiting discrimination based on race, color, national origin, and sex in the provision of benefits and services. For more information about Title VI, please call Jose Rivera, the WSDOT Title VI Coordinator, at (360) 705-7098.

Printed on April 21, 2005.

The preceding legal notice was advertised in the following newspapers on the dates noted:

King County Journal, April 21, 2005

NOTICE OF DETERMINATION OF NONSIGNIFICANCE

Washington State Department of Transportation (WSDOT) issued a determination of non-significance (DNS) for the Kirkland Nickel Project, which is approximately 7.6 miles long, running from the north side of the I-405 and SR 520 interchange and extending northward to the south side of the I-405 and SR 522 interchange. The principal features of the Kirkland Nickel Project proposed by WSDOT are:

- A northbound general-purpose lane will be constructed from the I-405 and NE 70th Street interchange to the I-405 and NE 124th Street interchange;
- A southbound general-purpose lane will be constructed from the I-405 and SR 522 interchange to the I-405 and SR 520 interchange;
- I-405 at the NE 116th Street interchange will be reconstructed, realigned, and reconfigured.

Other features of the project include:

- Improvements to interchanges at NE 85th Street and NE 116th Street;
- Stormwater management facilities, constructed to provide water quality treatment and detention and conveyance system upgrades;
- Features that incorporate elements of mobility, safety, environment, and aesthetics throughout the project; and
- Measures taken that will avoid or minimize effects to the environment.

After review of a completed environmental checklist and other information on file with the agency, WSDOT has determined this proposal will not have a probable significant adverse impact on the environment. Please note that our checklist document is titled, I-405, SR 520 to SR 522 – Kirkland Nickel Project, Environmental Assessment, and it was completed in February 2005. The document is available to be read during normal business hours at: I-405 Project Office, 600 – 108th Avenue NE, Suite 405, Bellevue; Bellevue Regional Library; Bothell Regional Library; Kirkland Library; Kingsgate Library; Woodinville Library; Mercer Island Library; Newport Way Library; Southcenter Library; Library Media Center, Bellevue Community College; and Suzzallo Library, University of Washington.

Copies of the DNS are available at no charge from Allison Ray, at the I-405 Project Office, 600 – 108th Avenue NE, Suite 450, Bellevue, WA 98004. The public is invited to comment on this DNS by submitting written comments no later than March 29, 2005 to Allison Ray at the above address.

Published in the *King County Journal*, March 14, 2005.

Attachment 3

FONSI Distribution List

To promote good communication and enhance interagency coordination, we acknowledge that this Finding of No Significant Impact (FONSI) is a public document, and has involved the public, agencies, and tribes in implementing NEPA procedures. The FONSI was sent to the following government agencies, tribes, organizations, and elected officials:

Federal Agencies

Bureau of Indian Affairs
U.S. Army Corps of Engineers
U.S. Department of Agriculture, Natural Resources Conservation Service
U.S. Department of Commerce, National Oceanic and Atmospheric Administration (NOAA)
Fisheries
U.S. Department of the Interior, Fish and Wildlife Service
U.S. Department of Transportation, Federal Transit Administration
U.S. Environmental Protection Agency, Region 10

Tribal Governments

Confederated Tribes and Bands of the Yakama Nation
Duwamish Tribe
Muckleshoot Tribe
Snoqualmie Tribe
Tulalip Tribes

State Agencies

Department of Agriculture
Department of Community, Trade, and Economic Development
Department of Ecology
Department of Fish and Wildlife
Department of Health
Department of Natural Resources
Washington State Transportation Commission

Regional Agencies

King County Department of Development Resources
King County Department of Transportation
King County Transit
Puget Sound Clean Air Agency
Puget Sound Regional Council
Snohomish County
Sound Transit

Local Agencies

City of Bellevue

- Goran Sparrman

- Franz Loewenherz
- Bernard Van DeKamp
- Kim Becklund
- Lucy Garrick

City of Bothell

- Dave Zabell
- Eddie Low

City of Kirkland

- Mayor Mary Alyce Burleigh
- Don Anderson
- Jennifer Schroder

City of Newcastle

- Fritz Timm

City of Redmond

- Don Cairns

City of Renton

- Nick Afzali
- Gregg Zimmerman

City of Tukwila

- Jim Morrow

City of Woodinville

- Joe Seet

Town of Yarrow Point

- Leonard Newstrum

Kirkland Advisory Committee

- Teresa Colberg, Everest Neighborhood Association
- Kathy Feek, Kirkland Cultural Commission
- Daniel Fisher, Kirkland Transportation Commission
- Andrea Gerth, Highlands Neighborhood Association
- Hugh Givens, Houghton Community Council
- Stuart Hall, North Rose Hill Neighborhood
- Carolyn Hayek, Downtown Action Team and Kirkland Downtown on the Lake
- Bret Johnson, Kirkland Economic Partnership
- Ben Lindekugel, Evergreen Hospital and Totem Lake Action Team
- Joan McBride, Kirkland City Council
- Norm Storme, Kirkland Transportation Commission
- Lise McCleery, North Juanita Neighborhood Association
- Charlie Wittenberg, Kirkland Chamber of Commerce
- Sue Keller, Highlands Neighborhood Association

CSS, Technical Advisory Committee

- James Leonard, Federal Highway Administration
- Mike Cotten, WSDOT
- Sally Anderson, WSDOT
- Paul Kinderman, WSDOT
- Mark Bandy, WSDOT, NW Region Traffic
- Mike Katzer, WSDOT

- Richard Zeldenrust, WSDOT, Bridge and Structures Office

Multi-Agency Permitting Team

- Penny Kelley, WA State Department of Ecology
- Jim Fraser, WA State Department of Fish & Wildlife
- Dan Hagglund, WA State Department of Transportation
- Kim Harper, WA State Department of Ecology
- Pat Klavas, WA State Department of Fish & Wildlife
- Christina Martinez, WA State Department of Transportation
- Jerry Shervey, WA State Department of Ecology
- Jason Smith, WA State Department of Transportation
- Kathryn Stenberg, U.S. Army Corps of Engineers
- Doug Dobkins, King County Department of Development and Environmental Services

Libraries

Bellevue Community College
 Bellevue Regional Library
 Bothell Regional Library
 Kirkland Library
 Mercer Island Library
 Newport Way Library
 University of Washington Libraries
 University of Washington, Bothell
 Woodinville Library

Elected Officials

Senator Rosemary McAuliffe, 1st District
 Representative Judy Clibborn, 41st District
 Representative Mark Ericks, 1st District
 Senator Luke Esser, 48th District
 Senator Bill Finkbeiner, 45th District
 Representative Bob Hasegawa, 11th District
 Representative Zack Hudgins, 11th District
 Representative Ross Hunter, 48th District
 Representative Fred Jarrett., 41st District
 Senator Adam Kline, 37th District
 Representative Toby Nixon, 45th District
 Representative Al O'Brien, 1st District
 Representative Eric Pettigrew, 37th District
 Senator Margarita Prentice, 11th District
 Representative Sharon T. Santos, 37th District
 Representative Larry Springer, 45th District
 Representative Rodney Tom, 48th District
 Senator Brian Weinstein, 41st District
 Congressman David G. Reichert, U.S. House of Representatives
 Senator Maria Cantwell, U.S. Senate
 Senator Patty Murray, U.S. Senate

Attachment 4

Mitigation Commitment List

This attachment describes project mitigation commitments. The mitigation measures are organized by elements of the environment, as presented in the EA. These commitments were included in the EA as Appendix E, List of Commitments, issued on February 23, 2005. Other information regarding these commitments is noted in Attachment 1 of this document, which contains errata for the project EA. This List of Commitments has been modified to identify the parties responsible for specific commitments and to incorporate revisions to the text.

These commitments have been adopted as part of FHWA's final decision on the Proposed Action. They are listed to "assist with agency planning and decision-making" and to "aid an agency's compliance with NEPA when no Environmental Impact Statement is necessary." [40 CFR 1501.3(b) and 1508.9(a) (2)]

List of Commitments Identified in the EA

WSDOT has well-established design and construction practices for avoiding or minimizing impacts resulting from environmental conditions anticipated along the project alignment. The following sections describe the measures that WSDOT will include in the project to avoid or minimize impacts during construction and operation.

Project Measures to Avoid or Minimize Effects During Construction

Design elements such as boundaries of areas that can be impacted that have been incorporated into the project specifications, as well as construction plans and procedures, will avoid or minimize most potential construction impacts. When appropriate, monitoring will be conducted to ensure that these design and construction measures are effective.

Measures for Geology, Soils, and Groundwater

Slope Stability and Landslide Areas

- A large landslide feature was identified at the northern end of the project. The contractor's geotechnical investigation during design will fully examine this area and develop appropriate construction procedures to maintain or enhance slope stability.
- The contractor shall submit earthwork and wall placement sequencing plans, construction drainage plans, and a slope monitoring program.
- During construction, areas of observed or suspected groundwater seepage shall be drained by the contractor to reduce the risk of landslide and surface sloughing through the use of gravel drainage blankets, french drains, horizontal drains, and/or placement of a surface rock facing or similar methods.

Soft Ground Areas

- During the design process, the contractor shall assess potential settlement problems associated with existing utilities or structures. If deemed necessary, structures could be underpinned and utilities relocated or made more flexible. In cases where it is an acceptable solution, the settlement will be allowed, with repairs made after settlement is complete. Where soft ground areas are identified, the contractor shall conduct pre-construction surveys and monitor construction settlements.
- Construction vibration, particularly generated by driven pile installation, large diameter drilled pier installation, and any required ground improvement, can cause settlement of adjacent areas underlain by loose granular soils. The contractor shall identify these areas during the design phase. The contractor shall develop the means and methods to avoid or minimize settlement.

Erosion

- The contractor shall prepare and implement a Temporary Erosion and Sedimentation Control (TESC) plan.
- Should any best management practices (BMPs) or other operation not function as intended, the contractor shall take additional action to minimize erosion, maintain water quality, and achieve the intended environmental performance.

Measures for Water Resources

- Groundwater shall be protected by the contractor with the use of standard BMPs.
- The contractor shall prepare and implement a TESC plan and a Spill Prevention Control and Countermeasures (SPCC) plan for all construction activities along the Kirkland Nickel Project alignment.
- The contractor shall take added measures during construction within the Kirkland Well Field's Wellhead Protection Area to protect the area, such as prohibiting fuel and chemical storage and refueling operations. Also, construction specifications will require stormwater collection with either a lined or piped conveyance system within the Wellhead Protection Area. Stormwater will be directed and discharged outside of the Kirkland Wellhead Protection Area to prevent any possible degradation of water quality. No permanent stormwater facilities will be constructed in the Kirkland Wellhead Protection Area.

Measures for Water Quality

- The contractor shall identify and develop staging areas for equipment repair and maintenance away from all drainage courses. Washout from concrete trucks will not be dumped into storm drains or onto soil or pavement that carries stormwater runoff. Thinners and solvents will not be used to wash oil, grease, or similar substances from heavy machinery or machine parts. The contractor will be required to designate a washdown area for equipment and concrete trucks.

Measures for Wetlands

- WSDOT and the contractor shall protect, preserve, and enhance wetlands in the project area during the planning, construction, and operation of transportation facilities and projects consistent with USDOT Order 5660.1A; Executive Order 11990, and Governor's Executive Orders EO 89-10 and EO 90-04.
- WSDOT and the contractor shall follow guidance contained in the wetlands section of the WSDOT Environmental Procedures Manual (WSDOT, 2004a), which outlines the issues and actions to be addressed prior to authorizing work that could affect wetlands.
- The contractor shall use high-visibility fencing to clearly mark wetlands to be avoided in the construction area.

- WSDOT's project-level design and environmental review has included avoidance, minimization, restoration, and compensation of wetlands. The contractor shall implement these measures prior to or concurrent with adverse effects on wetlands, to reduce temporal losses of wetland functions.
- Three sites will be used to provide the required wetland mitigation according to replacement ratios of each jurisdiction to fully replace the lost wetlands. The sites include: Forbes Lake West, Forbes Lake East, and Thrasher's Corner.
- WSDOT may deed the property on the west side of Forbes Lake to the City of Kirkland after this wetlands mitigation site has been constructed and monitored.
- WSDOT will use 4.5 acres of City of Kirkland property on the east side of Forbes Lake for mitigation.
- WSDOT will acquire 4.7 acres of private property south of Thrasher's Regional Park and west of SR 527 (Bothell-Everett Highway) and may deed this wetland mitigation site to the City of Bothell once it has been constructed and monitored.

Measures for Wildlife and Upland Vegetation

- The contractor shall ensure mitigation measures established in the I-405 Corridor EIS will be implemented on the Kirkland Nickel Project.
- The contractor shall prepare and implement a revegetation plan that has been approved by WSDOT. In addition, areas with mixed forest shall not be removed for temporary use (i.e., construction staging). If the contractor must permanently remove an area of mixed forest for roadway construction, it will be replaced with plantings of native tree and shrub species (acre for acre) within the affected area.
- The contractor shall not remove more than 80 acres of vegetation and areas with mixed forest for temporary use (i.e., construction staging). The contractor shall replace areas of mixed forest that will be permanently removed for roadway construction with plantings of native tree and shrub species (acre for acre) within the affected area.
- The contractor shall adhere to project conditions identified in the Biological Assessment and agency concurrence letters.

Measures for Fish and Aquatic Resources

- The contractor shall implement construction BMPs (such as silt fencing or sedimentation ponds) to avoid disturbing sensitive areas during the development and use of any staging areas, access roads, and turnouts associated with resurfacing activities.
- The contractor shall not allow in-water work to occur except during seasonal work windows established to protect fish.

- The contractor shall construct a fish-friendly culvert or bridge at Forbes Creek to restore fish passage beneath the freeway. Approximately 2,600 linear feet of stream between the freeway and Forbes Lake shall become available for fish use.
- If conditions allow, the contractor shall use bio-engineering techniques at new stormwater outfalls near Yarrow Creek, Juanita Creek, Forbes Creek and the Sammamish River.
- New stormwater discharged to Forbes Creek by the contractor shall be discharged to Forbes Creek via existing stormwater conveyances so no new outfalls (requiring grading or filling with bank-stabilizing or energy-dissipating riprap) shall be constructed in Forbes Creek.
- If the width of the road prism increases to accommodate the wider span of roadway at Forbes Creek and Stream KL8, the contractor shall construct retaining walls (e.g., headwalls) at the culvert inlet and outlet to minimize the amount of grading and filling.
- The contractor shall site the detention pond on the west side of I-405 at a sufficient distance south of Forbes Creek so no grading or filling in Forbes Creek or its stream-side zone shall be required.
- The contractor shall site and construct a combined stormwater treatment wetland/detention facility at a sufficient distance from both the Sammamish River and the unnamed stream KL14 (at Riverside Drive) so no grading or filling in the streams or the stream-side zones shall be required.

Measures for Air Quality

- The contractor shall prepare and implement a Fugitive Dust Control Plan in accordance with the Memorandum of Agreement between WSDOT and PSCAA Regarding Control of Fugitive Dust from Construction Projects (October 1999).
- During dry weather, the contractor shall spray exposed soil with water to reduce emissions of particulate matter (PM₁₀) and deposition of particulate matter.
- The contractor shall provide adequate freeboard (space from the top of the material to the top of the truck), cover truck loads, and, in dry weather, wet materials in trucks to reduce PM₁₀ and deposition of particulates during transport.
- The contractor shall use wheel washers to remove particulate matter that would otherwise be carried off site by vehicles to decrease deposition of particulate matter on area roadways.
- The contractor shall remove particulate matter deposited on public roads to reduce mud on area roadways.

- The contractor shall cover or spray with water any dirt, gravel, and debris piles during periods of high wind when the stockpiles are not in use to control dust and transmissions of particulate matter.
- The contractor shall route and schedule construction trucks to reduce travel delays and unnecessary fuel consumption during peak travel times to reduce secondary air quality impacts (i.e. emissions of carbon monoxide and nitrogen oxides) that result when vehicles slow down to wait for construction trucks.

Measures for Noise

- The contractor shall erect noise berms and barriers prior to other construction activities to provide noise shielding.
- The contractor shall limit the noisiest construction activities, such as pile driving, to between 7 AM and 10 PM to reduce construction noise levels during sensitive nighttime hours.
- The contractor shall equip construction equipment engines with adequate mufflers, intake silencers, and engine enclosures to reduce their noise by 5 to 10 dBA (U.S. EPA, 1971).
- The contractor shall turn off construction equipment during prolonged periods of nonuse to eliminate noise.
- The contractor shall maintain all equipment and train equipment operators in good practices to reduce noise levels.
- The contractor shall locate stationary equipment away from receiving properties to decrease noise.
- The contractor shall construct temporary noise barriers or curtains around stationary equipment that must be located close to residences, to decrease noise levels at nearby sensitive receptors.
- The contractor shall require resilient bed liners in dump trucks to be loaded on site during nighttime hours.
- The contractor shall require contractors to use OSHA-approved ambient sound-sensing backup alarms that could reduce disturbances during quieter periods.

New noise walls will be constructed at five locations (see Exhibits 4-2 and 5-8).

- Along the eastern edge of the I-405 right of way along the NE 160th Street northbound on-ramp to 118th Avenue NE. The noise wall (NW1) will be approximately 1,280 feet long and 20 feet high.

- Along the western edge of the I-405 right of way between NE 132nd Street and 113th Avenue NE. The noise wall (NW3) will be approximately 1,680 feet long and 18 feet high.
- Along the western edge of the I-405 right of way between the north end of the existing wall west of I-405 in the NE 95th Street vicinity and NE 100th Street. The noise wall (NW4) will be approximately 920 feet long and 16 feet high and have no gap between it and the existing noise wall.
- Along the eastern edge of the I-405 right of way between NE 80th Street and the off-ramp to NE 85th Street. The noise wall (NW7) will be approximately 735 feet long and 20 feet high.
- Along the eastern edge of the I-405 right of way between NE 60th Street and the existing noise wall south of NE 67th Place. The noise wall (NW8) will be approximately 500 feet long and 18 feet high and have no gaps between it and existing noise walls.

Noise walls will be relocated:

- Along the western edge of the I-405 right of way between NE 144th Street and the vicinity of NE 149th Street. The noise wall (NW2) will be approximately 1,565 feet long and 16 feet high.
- Along the eastern edge of the I-405 right of way between the end of the northbound on-ramp at the NE 85th Street interchange and NE 97th Street. The noise wall (NW5) will be approximately 1,325 feet long and 16 feet high and have no gaps between it and the remaining existing noise wall.
- In the vicinity of NE 92nd Street on the west side of I-405 where the existing noise wall was constructed in a depression, the new section of noise wall (NW6) will be 390 feet long and 16 to 20 feet high.
- Along the western edge of the I-405 right of way between NE 53rd Street and NE 65th Street. The noise wall (NW9) will be approximately 700 feet long and 12 feet high and have no gaps between it and the remaining existing noise walls. The replacement wall will be situated closer to the right of way line.

Measures for Hazardous Materials

Known or Suspected Contamination within the Build Alternative Right of Way

- The contractor shall prepare a SPCC plan that provides specific guidance for managing contaminated media that may be encountered within the right of way.
- WSDOT may be responsible, depending on existing cleanup orders at the time of acquisition, for the remediation and monitoring of contaminated properties that will be acquired for this project. In such cases, WSDOT will further evaluate the

identified properties to assess their condition before acquisition or construction occurs.

- Prior to construction, the contractor shall have a thorough asbestos-containing materials/lead based paint (ACM/LBP) building survey completed by a certified building inspector on all property structures that will be demolished. All costs associated with the inspection, removal, and disposal of ACM/LBP shall be included in the contractor's lump-sum bid.
- If WSDOT acquires a portion or all of a property (building, structure) suspected of containing ACM/LBP, the contractor shall properly abate and dispose of any existing ACM/LBP contamination prior to construction activities. Depending on the concentration of lead in the demolition debris, some debris may need to be disposed of as dangerous waste, which will require Ecology to be notified and that appropriate regulations are followed.
- If the contractor encounters an underground storage tank (UST) within its right of way, WSDOT will assume cleanup liability for the appropriate decommissioning and removal of USTs. If this occurs, WSDOT and the contractor shall follow all applicable rules and regulations associated with UST removal activities.
- The contractor shall dispose of construction waste material such as concrete or other harmful materials at approved sites in accordance with Sections 2-01, 2-02, and 2-03 of the WSDOT Standard Specifications.
- WSDOT may acquire the responsibility for cleanup of any soil or groundwater contamination encountered during construction (that must be removed from the project limits) within WSDOT right of way. Contamination will be evaluated relative to Model Toxics Control Act cleanup levels.
- The contractor shall meet all regulatory conditions imposed at contaminated properties (e.g., Consent Decree) associated with construction. These conditions could include ensuring that the surrounding properties and population are not exposed to the contaminants on the site: i.e., the contractor shall ensure that the site is properly contained during construction so that contaminants do not migrate off site and so that the health and safety of all on-site personnel are protected during work at the site.
- WSDOT will consider entering into a pre-purchaser's agreement, dependant on discussions with property owners, for the purposes of indemnifying WSDOT against acquiring the responsibility for any long-term cleanup and monitoring costs.

Known or Suspected Contamination Outside of the Right of Way

- Contaminated groundwater originating from properties located up-gradient of the right of way could migrate to the Project area. WSDOT generally will not incur liability for groundwater contamination that has migrated into the project footprint

as long as the agency does not acquire the source of the contamination. However, the contractor shall manage the contaminated media in accordance with all applicable rules and regulations.

Unknown Contamination

- If WSDOT acquires a property that has unknown contamination, the agency could incur liability for any contamination discovered after acquisition, as well as liability for the removal of any stored materials remaining onsite at the time of the acquisition. WSDOT could be responsible for cleanup or disposal of these unknown substances, for example, USTs and contaminated media (including ACM/LBP). If unknown contamination is discovered during construction, the contractor will follow the SPCC plan as well as all appropriate regulations.

Worker and Public Health and Safety

The contractor shall comply with the following regulations and agreements:

- State Dangerous Waste Regulations (Chapter 173-303 WAC);
- Safety Standards for Construction Work (Chapter 296-155 WAC);
- National Emission Standards for Hazardous Air Pollutants (CFR, Title 40, Volume 5, Parts 61 to 71);
- General Occupational Health Standards (Chapter 296-62 WAC); and
- Implementing Agreement between Ecology and WSDOT Concerning Hazardous Waste Management (April 1993).

Hazardous Materials Spills During Construction

- The contractor shall prepare and implement a SPCC plan to minimize or avoid effects on soil, surface water, and groundwater.

Measures for Traffic and Transportation

- The contractor shall prepare and implement a Traffic Management Plan (TMP) prior to making any changes to the traffic flow. The contractor shall inform the public, school districts, and emergency service providers of the changes ahead of time through a public information process.
- Prior to and during construction, WSDOT will implement strategies to manage the demand on transportation infrastructure. These transportation demand management strategies will form an important part of the construction management program and will be aimed at increasing public awareness and participation in HOV travel.

Measures for Visual Quality

- The contractor shall follow the I-405 Urban Design Criteria. Where the local terrain and placement of light poles allow, the contractor shall reduce light and glare effects by shielding roadway lighting and using downcast lighting so light sources shall not be directly visible from residential areas and local streets.
- The contractor shall restore (revegetate) construction areas in phases rather than waiting for the entire project to be completed.

Measures for Communities, Neighborhoods, and Businesses

Communities and neighborhoods

- The contractor shall prepare and implement a transportation management plan (TMP). If local streets must be temporarily closed during construction, the contractor shall provide detour routes clearly marked with signs.
- The contractor shall coordinate with school districts before construction.
- The contractor shall implement and coordinate the TMP with all emergency services prior to any construction activity.
- The contractor shall coordinate with utility providers prior to construction to identify conflicts and resolve the conflicts prior to or during construction.

Businesses

- The contractor shall maintain access to businesses throughout the construction period through careful planning of construction activities and an awareness of the needs to provide adjacent properties with reasonable access during business hours. As part of construction management, access measures shall be prepared by the contractor.
- Because it can be difficult to determine whether a business is open, or how to access the site during the construction period, the contractor shall make provisions for posting appropriate signs to communicate the necessary information to potential customers.
- The contractor shall keep daytime street closures to a minimum to provide access for businesses during regular business hours.
- In those situations where it is necessary to acquire property, WSDOT will conform to the requirements set forth in the Federal Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970, as amended, and implemented by FHWA under 49 CFR, Part 24, and according to Chapter 468-100 WAC Uniform Relocation and Assistance and Real Property Acquisition. This will ensure just compensation of all properties and have a minimal effect on the current owners and residents. Relocation resources are available, without discrimination, to all eligible residential and business relocates.

- WSDOT will prepare a relocation plan in advance of actual displacements. Additional information will be collected, possibly through property owner interviews, to identify the specific needs of any business that will be relocated.

Measures for Public Services and Utilities

- The contractor shall prepare and implement a TMP. The contractor shall post signs to show detour routes if periods of closure are needed.
- The contractor shall coordinate with school districts before construction.
- The contractor shall implement and coordinate the TMP with all emergency services prior to any construction activity.
- The contractor shall coordinate with utility providers to identify conflicts and resolve them prior to or during construction.
- Prior to removal of the park-and-ride facility at NE 116th Street and 120th Avenue NE, the contractor shall post signs at the lot to announce closure, and shall identify the location of nearby lots.
- Potential utility conflicts within WSDOT right of way shall be relocated at the utility's expense prior to contract award.

Measures for Recreational and Cultural Resources

- WSDOT will prepare an Unanticipated Discovery Plan for the project that the contractor shall follow. This will avoid or minimize unanticipated effects to historic, cultural, and archaeological resources.

Project Measures to Avoid or Minimize Effects During Operation

The following sections describe the measures that WSDOT will implement during operation.

Measures for Water Resources and Groundwater

- WSDOT will follow the Highway Runoff Manual for both the design and implementation of stormwater facilities.

Measures for Fish and Aquatic Resources

- The contractor shall control stormwater so peak and base flows in Yarrow Creek, Forbes Creek, Juanita Creek, and the Sammamish River are not adversely affected by treated stormwater discharge from the expanded impervious surface areas created by the project.
- The contractor shall capture sheet flow from roadway surfaces to be held in detention facilities prior to its controlled discharge into streams within the same

drainage basin. As a result, peak and base stream flows shall not be adversely affected by the increase in impervious surface.

- The contractor shall manage off-site flow to unnamed stream KL14 so peak and base flows are not adversely affected by the new stormwater treatment and detention facilities in the vicinity of this stream.
- Ongoing maintenance (during and post-construction) of stormwater treatment and detention facilities by the contractor and WSDOT shall not include the application of any chemical weed control agents (e.g., herbicides).

Attachment 5

Written Comments and Responses

In this attachment, we summarize and present written comments (via letters, emails, and telephone calls) in the order they were received. Each comment, referred to as a correspondence comment (CC), and numbered sequentially, is printed in its entirety, followed by our response to that comment.

Several comments pertain to noise wall feasibility and reasonableness. The decision on whether or not to include each noise wall in the project was made according to WSDOT's policy on noise barrier feasibility and reasonableness. Determination of engineering feasibility included whether barriers could be built in a location to achieve a noise reduction of at least 7 dBA at one or more receptors, and a reduction of at least 5 dBA at the majority of the first row of receptors.

Determination of reasonableness included the number of sensitive receptors benefited by at least 3 dBA, the cost-effectiveness of the barriers, and concerns such as aesthetics, safety, and the desires of nearby residents. The WSDOT policy states that it is reasonable to provide up to 700 square feet of barrier for residences that experience a noise level of 66 dBA. The allowed reasonable area increases to 1,244 square feet per residence for a noise level of 74 dBA.

Index to Written Comments and Responses

Chittim, Cam Johnson - private citizen (CC 1-1)
Harris, Pat - private citizen (CC 2-1)
Rosenfeld, Michael - private citizen (CC 3-1)
Witmer, John - Federal Transit Administration (CC 4-1 through CC 4-3)
Martin, Ann - King County Office of Regional Transportation Planning (CC 5-1 through CC 5-11)
Reichgott, Christine B., - Environmental Protection Agency (CC 6-1 through CC 6-6)
Walter, Karen - Muckleshoot Tribe (CC 7-1 through CC 7-70)
Kelley, Penny - Department of Ecology (CC 8-1 through CC 8-13)

Comments Received Via Written Correspondence/Emails /Telephone

Email to Christina Martinez from Cam Johnson Chittim

Comment CC 1-1

From: Cam Johnson [mailto:cjohnson@nwcen.com]
Sent: Friday, February 25, 2005 3:17 AM
To: Christina Martinez
Subject: I-405 Expansion Comment

I don't think I'll make it to the public hearing because my work always seems to conflict -but I hope I can put my comment in by email:

I support the expansion. I live right alongside I-405 at 6514 114th Ave NE Kirkland. We are on the west side of the freeway, just south of the 70th street onramp. Our neighborhood already desperately needs an upgrade to our sound wall, the only barrier between us and the freeway. Now, with an additional lane coming, it's even more imperative that this upgrade happen.

Are there plans for sound wall/noise barrier upgrades??

Thanks so much,

Cam Johnson Chittim

Response to Comment CC 1-1

The residence at 6514 114th Avenue SE is near receptor 20 in the Noise Discipline Report. You can clearly hear the traffic at this location; however, noise levels neither currently approach or exceed the noise abatement criteria, nor are they expected to do so in the future (2030). Noise walls are not constructed where noise levels are not predicted to approach or exceed the FHWA noise abatement criteria (67 dBA) at nearby sensitive receptors. Existing noise levels were modeled at 63 dBA. According to the results of noise modeling, 2030 noise levels with the proposed project will be approximately 64 dBA. As a result, no noise wall is proposed. The criteria for determining the reasonableness of constructing new noise walls are discussed on page A-29.

Telephone Message to Christina Martinez, Environmental Project Manager, from Pat Harris on March 11, 2005

Comment CC 2-1

I received a phone call from Pat Harris, a citizen residing along the I-405 Kirkland Project Area. Mr. Harris inquired whether we would be permanently removing any noise walls as a part of the upcoming construction. He resides on Slater Ave South, to the west of I-405 between NE 85th and 116th.

Response to Comment CC 2-1

I indicated that the current project proposal was to replace and relocate a few existing noise walls and construct a few new walls. I also indicated that the project does not plan to remove existing noise walls without replacing them.

Letter to Christina Martinez from Michael Rosenfeld on March 20, 2005

Comment CC 3-1

March 20, 2005

Christina Martinez
Washington State Department of Transportation
600-108th Avenue NE, Suite 405
Bellevue, WA 98004
Subject: Comment on the EA for the I-405, SR 520 to SR 522 – Kirkland Nickel Project

Dear Ms. Martinez:

First, I would like to state for the record, that I support this project. I have been a registered Professional Civil Engineer in the State of Washington for many years and am a strong supporter of our tax dollars being spent on useful capital projects that can improve the quality of our lives.

My home is about 300 feet east of I-405 at NE 48th. This section of Northbound I-405 does not have any noise barrier wall and as a consequence, we live with significant noise impacts. In addition to people that live in this area, the walking trails along 116th and near Bridle Trails Park are significantly impacted by the freeway noise. With the expansion of southbound I-405 in this area, the noise impacts will undoubtedly become worse.

That being said, I'm very, very disappointed in WSDOT's decision to ignore the noise impacts along the Northbound side of I-405 between about NE 35th and NE 65th where no new noise barrier wall is contemplated as part of this project.

As demonstrated so well in the Environmental Assessment, WSDOT is spending millions of dollars to mitigate a variety of environmental impacts of the project on surface water, wetlands, fish and aquatic habitat.

What I want to know is: Why doesn't WSDOT have the same concern for people as it apparently has for fish?

This is an opportunity for WSDOT to take positive steps to mitigate a significant existing noise impact on people (and it's just going to get worse once the project is constructed). The project is real and funded with our tax dollars; you have prepared bid documents; the contractors will be in the field in this area fully mobilized with all of their construction equipment. The construction of noise barrier walls on the Northbound side of I-405 between NE 35th and NE 65th will never be less expensive than it will be right now.

I'm writing to request that you review and reconsider this decision. Thank you for your attention to this matter.

Sincerely,

Michael Rosenfeld

Michael Rosenfeld
11708 NE 48th Place
Kirkland, WA 98033

cc:

Senator Luke Esser
Representative Ross Hunter
Representative Rodney Tom
King County Councilwoman Jane Hague
Sablewood Homeowner's Association

Response to Comment CC 3-1

Mr. Rosenfeld's residence is near receptors 5 and 6 in the Noise Discipline Report. You can clearly hear the traffic at this location; however, noise levels neither currently approach or exceed the noise abatement criteria, nor are they expected to do so in the future (2030). Noise walls are not constructed where noise levels are not predicted to approach or exceed the FHWA noise abatement criteria (67 dBA) at nearby sensitive receptors. Existing noise levels were modeled at 62 to 63 dBA. According to the results of noise modeling, 2030 noise levels with the proposed project will be approximately 63 dBA.

Email from John Witmer, Federal Transit Administration, to Christina Martinez on March 18, 2005

From: Witmer, John (TRO-10) [mailto:John.Witmer@fta.dot.gov]
Sent: Fri 3/18/2005 5:12 PM
To: Christina Martinez
Cc: Bowman, Jennifer (TRO-10)
Subject: Kirkland Nickel Project EA

Christina, I have a few comments on the EA.

Comment CC 4-1

(1) How does the Nickel project impact transit? I don't see a discussion of this in Chapter 5.

Comment CC 4-2

(2) I see you've identified the Sound Transit Totem Lake project in Exhibit 4-2. How does the Nickel project affect that project?

Comment CC 4-3

(3) In what way does the Nickel project affect the I-405 BRT effort?

Thanks for your help. John W.

John Witmer
FTA Region 10, 915 2nd Avenue, Suite 3142
Seattle, WA 98174-1002

Response to Comment CC 4-1

1) During construction, transit should not notice any big change in its operations. Lane closures will occur, but are only anticipated during the late night hours. There may be an occasional closure during the weekends, but the overall impacts to transit operation will be minimal. Once the project is built, transit should see an improvement in the morning trips through Kirkland. Freeway operations overall will improve access in and out of the HOV lanes.

Response to Comment CC 4-2

2) The two projects will complement one another once they are built. Close coordination will occur during construction to address any conflicts that may arise by having two different projects under construction at one time.

Response to Comment CC 4-3

3) The Kirkland Nickel Project is a phased project that builds toward the I-405 Master Plan, which includes bus rapid transit (BRT). This project does not implement any element that will reduce or preclude the potential for BRT in the corridor. BRT continues to be an important component to the I-405 Corridor.

***Email from Ann Martin, King County Office of Regional Transportation Planning,
to Christina Martinez on March 23, 2005***

Thank you for the opportunity to review the Environmental Assessment for the I-405 Kirkland "Nickel" Project. We appreciate the work that went into getting extensive agency and public involvement in the project via the scoping and draft document review processes. The "accessible" format is an important enhancement to the environmental review process; we hope you will continue to refine and use this format in the future.

The following comments focus primarily on transportation:

- | | |
|---------------|--|
| CC 5-1 | Page 1-1 - The project is a part of the overall "I-405 Corridor Congestion Relief and BRT Program" and should be identified as such in the document. |
| CC 5-2 | Page 2-2 - In the discussion of "What happens if the Kirkland Nickel Project is not built?" you should indicate that greater demand for transportation modes other than driving alone would result. Meeting such demand would be difficult, but even if met, there would likely be substantial increases in congestion, especially during extended peak periods. |
| CC 5-3 | Page 4-1 - The Northbound and southbound I-405 project depictions should be placed side-by-side and include shoulder areas in order to more accurately depict the width of the facility and the amount of paving involved. |
| CC 5-4 | Page 4-21 - The discussion of slope stability identifies a landslide hazard area, but the rest of the discussion seems to indicate the slope is sliding or has been sliding. Please clarify. This discussion should be clarified with regard to the emergent condition of the hillside. |
| CC 5-5 | Page 4-25 - The list of groups providing assistance in the development of CSS guidelines should include the North Corridor Advisory Committee, which, although formed later than the Kirkland Advisory Committee, continues to provide suggestions for project refinements. |
| CC 5-6 | Page 4-27 - The staging of construction staying out of King County Sensitive Areas is a good thing. It may, however, be necessary to stay out of other areas that are identified in the field as sensitive areas. You should include a statement to that effect as well. |
| CC 5-7 | Page 5.1-1 - The reference to "King County Metro" should be changed to "King County Department of Transportation" or "King County." |

CC 5-8

Page 5.1-1 - It is unclear how 11,000 fewer drivers will be able to use the road in 2014 and 16,000 fewer drivers in 2030. If the road is full, such that some drivers will not be able to use the road if the project is not constructed, how can even more drivers use the road, and still more drivers not be able to use the road in 2030. The way I read the numbers in this section, without the project, 200,000 vehicles will use the road in 2014 (211,000 minus 11,000) and 223,000 will use it in 2030 (239,000 minus 16,000). How does this work?

CC 5-9

Page 5.1-2 - In describing the number of vehicles in the general-purpose lanes and in the HOV lane, it would be appropriate to give the per lane average. Also, it is unlikely the HOV speed will remain at 60 miles per hour if the speed in the general-purpose lanes drops to an average of 35 miles per hour. With an unprotected HOV lane, it is likely the speed in the HOV lane will be no more than 15 miles per hour faster than the general-purpose lanes. (This also is a problem in Exhibit 5-3, where the HOV speeds for the 2014 and 2030 No-Build Alternative are likely to be only about 50 and 47 miles per hour respectively. The same principal applies to the northbound evening travel as well.)

CC 5-10

Page 5.1-9 (and other places) - The discussion of facilities for pedestrians and bicyclists is lacking substance. In particular, accommodation of pedestrians crossing roads at or near I-405 interchanges needs to be more thoroughly discussed. In some cases, the movement of pedestrians, in particular, will conflict with the desire to move vehicles quickly off of or onto ramps accessing the freeway. These are not minor issues, as they will affect operations of the roads as well as safety for walkers. In addition transit service is likely to require people who want to use that service to cross the street in one direction or the other as part of a round trip. Such considerations should not be after-thoughts to project designs, but be built into the project assumptions and designs from the beginning.

CC 5-11

Page 5.4-6 - The focus again seems to be on vehicle safety. Particularly in neighborhoods, shorter periods of congestion that will allow an interchange or other facility to operate more "efficiently" may not increase safety for pedestrians or for bicyclists.

Finally, it is understood the state has issued a determination of non-significance and the Federal Highway Administration is expecting to issue a Finding of No Significant Impact for this project. Nonetheless, we hope you will consider these comments in this case and in future projects in this corridor.

Thank you for your attention to these comments. If you have any questions, please contact me by email or by phone at 206-263-4711.

Ann

Response to Comment CC 5-1

Page 1-1, line 3, “I-405 Corridor Program” has been changed to read: “I-405 Corridor Congestion Relief and Bus Rapid Transit Program.”

Response to Comment CC 5-2

Comment noted. The following sentence has been added to page 2-2 of the EA (see Errata), “There will also be a greater demand for other modes of transportation.”

Response to Comment CC 5-3

The intent of this graphic is to illustrate the existing and proposed number of lanes. The shoulder width is not constant and varies from area to area depending on right of way availability and other factors.

Response to Comment CC 5-4

The discussion is correct. There is an ancient landslide area at the north end of the project near SR 522. An area west of the right of way has had slides in recent times and will be stabilized as part of the project.

Response to Comment CC 5-5

Comment noted. Page 4-25, the following statement has been added to the end of the third paragraph: “The North Corridor Advisory Committee also continues to provide suggestions for project refinements.”

Response to Comment CC 5-6

The performance standards contained in the biological assessment for the project (bottom of page 4-27) lists other conditions for avoidance of sensitive areas.

Response to Comment CC 5-7

Page 5.1-1, second paragraph, “King County Metro” has been changed to read “King County.”

Response to Comment CC 5-8

By building the project, 11,000 more vehicles per day can use I-405 in the year 2014. In the year 2030, 16,000 more vehicles per day can use I-405. What this section in the EA explains is that by building the project, we can accommodate more vehicles. By not building the project, 11,000 vehicles in 2014 and 16,000 vehicles in 2030 will need to use other transportation facilities.

Response to Comment CC 5-9

Comment noted on the request to have the number of vehicles put into a per-lane average. There are various ways to report the numbers. With respect to the speed differences between the high-occupancy vehicle lanes and the general-purpose lanes, existing speed data from our field data stations do not support the idea that speeds in the high-occupancy lane will be no more than 15 mph above the general-purpose lanes.

Response to Comment CC 5-10

Currently at the NE 116th Street interchange, pedestrians are only allowed on the north side of the interchange. This is due to the lack of adequate pedestrian facilities between 120th Avenue NE and the eastside of the interchange. With this project, the sidewalks will be built on both sides of the interchange and have a special scoring pattern and color. In the traffic islands that will be constructed at the ramp connections, defined areas will be provided to help guide the pedestrians to the appropriate location to cross the ramps. Special attention will be given to the sight distance needed by the driver to see the pedestrians.

Early in the implementation of single point urban interchanges elsewhere in the country, some professionals found them to be less safe for pedestrians. Since then, more attention has been placed on their design with respect to pedestrians. It is true the single point urban interchange is a highly-efficient interchange design for vehicles; however, designing a diamond interchange at this location would have had similar pedestrian crossings.

We feel that we have struck a balance between the need to move vehicles through this area and the need to accommodate pedestrians with our design. This would be true for bicycles, too.

With respect to transit service, currently there are transit stops west of the intersection of NE 116th Street and 120th Ave NE, and east of the interchange on 124th Ave NE and NE 116th Street. Both intersections currently have, and will continue to have after the project is built, pedestrian crossings on all legs of the intersection. Maintaining these crossings will facilitate full pedestrian access to these transit stops, regardless of where pedestrians start their walk to the transit stop.

Some interchange improvements are also identified at the NE 85th Street interchange. These improvements include addressing a high accident location for vehicles at the off-ramp from southbound I-405 to westbound NE 85th Street, and another high accident location and congestion point for vehicles at the off-ramp from northbound I-405 to eastbound NE 85th Street. Both improvements will also benefit pedestrians.

For the southbound improvements, the ramp will be reconfigured so vehicles can move perpendicular to NE 85th Street. This will help drivers coming from I-405 to better see cars and pedestrians on NE 85th Street approaching from the east.

At the northbound off-ramp, a signal will be constructed to help traffic exiting I-405 to obtain a gap in the NE 85th Street traffic. This will also provide for a signalized crossing for pedestrians.

Response to Comment CC 5-11

The project will improve pedestrian access through the NE 116th Street interchange by providing pedestrian facilities on the south side of the interchange. The improvements at NE 85th Street not only benefit vehicles, but also pedestrians and bicyclists.

Insert Comments from EPA (4 pages)

Responses to Environmental Protection Agency Comments

Response to Comment CC 6-1

The Kirkland Nickel Project was put on an accelerated schedule so that the results of the nickel gas tax could be demonstrated with construction projects. As a result, we were not able to use early action wetland mitigation for project. Nevertheless, construction of wetland mitigation sites will be one of the first elements completed for the project. In fact, the wetland mitigation will take place five years before Stage 2 of the project is completed.

The approach to the wetland mitigation is consistent with the commitments in the ROD (commitments 26, 27, 28, and 29). We first attempted to avoid impacts to wetlands by using retaining walls and headwalls. We then tried to minimize impacts by delineating construction work area boundaries and requiring features such as silt fences or other BMPs in the project commitments. We went through an extensive process of identifying potential mitigation sites and then worked with local jurisdictions to select the sites to be used for mitigation. The guidance in the WSDOT Environmental Procedures Manual was used to develop mitigation plans for each of the three wetland mitigation sites so that mitigation requirements of local jurisdictions were met. In addition, stormwater treatment facilities have been designed to comply with the WSDOT Highway Runoff Manual (2004).

The early action mitigation program (Early Environmental Investments) is presently being developed for use by other I-405 Corridor projects.

Response to Comment CC 6-2

The commitments from the Record of Decision (ROD) were used as a basis for developing avoidance and effect minimization strategies for the project. For example, we avoided impacts to the Kirkland Well Field by specifying that stormwater would be piped around the up-gradient area, rather than allowing infiltration. We also specified the use of headwalls around culverts to minimize effects to riparian areas. Retaining walls and requirements for demarcation of sensitive areas are also identified as avoidance and minimization measures. Many of our project commitments are project-specific versions of the commitments found in the ROD.

Response to Comment CC 6-3

Kirkland Nickel Draft Wetland Mitigation Plan was being completed when the EA was distributed. The draft mitigation plan is now being circulated for agency review. A copy will be forwarded to you.

Response to Comment CC 6-4

It was difficult to get representative pictures of the different types of wetlands that were going to be affected by the project that could be incorporated as small photographs in the reader-friendly style document. Your comment is appreciated and an effort will be made to show photographs of different wetland types in future reader-friendly reports.

Response to Comment CC 6-5

The revised Ecology (2004) wetland rating system replaces the old rating system that was based on physical characteristics with a new system that is based on a functional assessment of each wetland. The evaluation of functions and ratings is now intrinsic to the wetland classification as shown in Table 5.1 of the Wetland Discipline Report. The revised wetland rating system addresses these differences in its introduction. The revised manual states:

“Changes have also been made in the categorization based on how well a wetland performs different functions. The earlier editions focused on habitat functions because more was known, at that time, about habitat than the hydrologic or “water quality” functions. Our understanding of the latter functions, however, has increased significantly in the last decade, and we are in a position to now include indicators of hydrologic and ‘water quality’ functions in the questionnaire. The categorization based on functions is now equally based on habitat functions, the hydrologic functions (flood storage and reducing erosion), and the functions that improve water quality (sediment retention, nutrient removal, and removal of toxic compounds). Much of the information on wetland functions used in this version of the rating system was derived from the data and knowledge developed during the “Washington State Wetland Functions Assessment Project” (Hruby et al., 1999). In the first and second editions of the rating system, wetlands with a high level of functions, but no other important attributes, could only rate a Category II or a Category III. In this edition, wetlands that are performing all three types of functions well can be rated a Category I. Conversely, wetlands performing all functions poorly are rated as a Category IV.”

Response to Comment CC 6-6

We appreciate your recommendation. We have revised the List of Commitments, included as Attachment 4, to provide better definition of who will be implementing individual measures.

Insert Comments from Muckleshoot Tribe (12 pages)

Responses to Comments from the Muckleshoot Tribe

Response to Comment CC 7-1

WSDOT evaluated cross culverts using fish passage criteria developed by WDFW, U.S. Army Corps of Engineers and the Washington Department of Ecology (Ecology). After several years of study and developing fish passage criteria for all species the primary authors published the passage evaluation and criteria in the following documents:

- Fish Passage Barrier and Surface Water Diversion Screening Assessment and Prioritization Manual – WDFW
- Fisheries Handbook of Engineering Requirements and Biological Criteria, 1991, Milo Bell, U.S. Army Corps of Engineers, North Pacific Division
- Fish Passage Design at Road Culverts - WDFW
- Aquatic Habitat Guidelines: An Integrated Approach to Marine, Freshwater, and Riparian Habitat Protection and Restoration
- Integrated Streambank Protection Guidelines
April 2003 – WDFW, WSDOT, and Ecology

WSDOT used these references to assess the hydraulic connection as well as the biological benefits. Most of the culverts conveyed natural waters, but very few had fish habitat functions associated with the natural flows. If there was functioning habitat upstream, passage was recommended.

The primary reason for not recommending culvert replacement is based on the on-site assessment of fish life and stream habitat functions and values. Culvert replacement is not recommended where there were no signs or extremely limited signs of fish life or stream habitat functions above the freeway.

Response to Comment CC 7-2

Stream KL14 flows through wetland 22.8L. The road construction impacts are limited to the steep vegetated slide slopes (0.136 acres) of a type III (old Ecology rating system) wetland. There will be no fill or construction impacts to the stream, although filling is planned for part of the wetland. The resulting loss of wetland functions will be offset by beneficial actions that include creation and restoration of over 4.1 acres of a Type II wetland (old Ecology rating) near Thrasher's Corner and adjacent to North Creek. The project includes creation, enhancement, and preservation of wetlands at Thrasher's Corner.

At KL14, the natural stream functions will be protected so that coho or other resident fish species could rear in this area if the barriers in the lower stream sections are fixed. Currently, highway runoff is discharged into KL14, but the new stormwater plan eliminates the freeway stormwater discharge from mixing with the natural flows

in KL14. This stormwater design is the same throughout the project on all natural stream systems; stormwater will now be treated before discharge into natural waters.

Response to Comment CC 7-3

As described in Table 7-1 of the Environmental Justice Discipline Report (I-405, SR 520 to SR 522 – Kirkland Nickel Project, Environmental Assessment, Appendix K) the Build Alternative would not affect study area historic, cultural, or archaeological resources. No Section 106 issues have been identified. Furthermore, the Build Alternative would result in a general improvement in local fish/aquatic habitat conditions due to the implementation of enhanced stormwater treatment facilities. No negative effects on Muckleshoot Tribe treaty fishing areas are expected, so there will be no disproportional impacts resulting from the project.

Response to Comment CC 7-4

We agree that a common nomenclature could have been used. The larger stream systems have complete water resource inventory area (WRIA) and stream index numbers. The WRIA is a common reference but the stream index numbers were developed by WDFW for permit purposes and stream inventory. Other jurisdictions use them (i.e., Muckleshoot Tribe) but they are not universal. Unfortunately, most of the Kirkland streams are “unnamed.” Using the WDFW nomenclature, an example for an unnamed tributary (C5) to Yarrow Creek would be WRIA 08.unnamed tributary to Yarrow Creek (0252). All the known and named streams are referenced by name.

Response to Comment CC 7-5

The authors used the SalmonScape database on the WDFW Web site. SalmonScape is a cooperative venture with the NW Indian Fisheries Commission. The authors not only used SalmonScape for fish distribution, maps, etc., they also provided information to the database managers to update the information. Primary authors of fish distribution papers and reports from King County, WDFW, University of Washington School of Fish and Ocean Sciences, and local jurisdictions were contacted. The Muckleshoot Tribe was contacted during the draft EA process regarding technical issues within the document.

Response to Comment CC 7-6

The complex maze of underground pipes outside of the Kirkland Project area is poorly documented and there is no single summary reference for the natural streams. The best document available for this information is referenced as the *Watershed Company, 1998*. The City of Kirkland Department of Public Works also provided maps and information that identified the water routes through the developed areas.

Response to Comment CC 7-7

The original methodology was based on methodology requirements outlined by King County. The survey methods have been modified to reflect a simpler and more strategic approach to habitat values and functions and associated fish use. As with all large-scale projects, long-term success depends on lessons learned and improving our abilities to avoid or minimize environmental impacts. Good science, accuracy,

relevance, and efficient data collection is our goal for all surveys. We appreciate your input regarding sampling techniques and methodology.

Response to Comment CC 7-8

The Timber, Fish, and Wildlife type survey methods were used as part of the field methodology.

Response to Comment CC 7-9

The 30-foot limits for the ordinary high water level (OHWL) evaluation were intended to address project impacts and a potential for take of critical habitat below the OHWL because construction limits will not extend beyond this distance. It was also intended to delineate between stream habitat and riparian zones. Other habitats outside of the OHWL will also be mitigated. The OHWL is a legal boundary for some state and local regulatory jurisdictions.

Response to Comment CC 7-10

In the past, there have been more intensive studies on individual streams within the project area. This effort by WSDOT is an updated comprehensive assessment of stream function and values that target the streams and wetlands within the project area for those systems that may be impacted by project activities. The surveys do not account for all the streams in the vicinity or within the same subbasins.

Response to Comment CC 7-11

WSDOT manages an Early Environmental Investment program for the I-405 Corridor projects. WSDOT is developing large-scale mitigation sites intended to provide watershed-scale-level benefits for fish life, wetland habitat, and other natural environments. Additionally, the Kirkland Nickel Project has conducted on-site (within subbasin) and like-kind projects that are intended to compensate for the impacts of this project and Sound Transit's NE 128th Street Project (430 square feet of permanently-impacted wetlands). They include Forbes Lake wetlands and Thrasher's Corner wetlands. These mitigation sites were strategically located in order to satisfy local jurisdictional requests for an increase in eco-connectivity to other natural functioning habitat sites. Both Forbes Lake sites and the Thrasher's Corner site are located adjacent to existing public (City owned) properties. Each mitigation plan calls for the local jurisdiction to eventually own and manage the property. The Forbes Lake and Thrasher's Corner sites are intended to satisfy the Kirkland Nickel wetland mitigation requirements only.

Response to Comment CC 7-12

Flow control treatment will be provided for the project in accordance with local and state stormwater guidelines and standards. Flow control treatment BMPs will be employed for each threshold discharge area meeting or exceeding the minimal threshold values for new impervious surface. At a minimum, flow control is provided for 100 percent of the new impervious surface within each affected threshold discharge area in the Kirkland Nickel Project. Additionally, water quality treatment BMPs will be provided to meet and exceed the minimum treatment levels for each of the affected threshold discharge areas. The I-405 team has a commitment to provide

water quality treatment for the Kirkland Nickel Project at a level that is 322 percent greater (by area) than required by state standards. See Summary Table 4.2 below for a description of water quality treatment levels per threshold discharge area.

Table 4.2 Summary Table for Pavement Runoff Treatment

Basin Name	Facility I.D.	Sta to Sta (MP to MP)	Contributing EIS Area (ac)	New Pavement Area (ac)	% Treatment of Pavement Area	Facility Type	Facility Length (ft)	Facility Size Area (sf) *
A1	A1.1	4013 - 4027 (15.89 - 16.22)	1.11	1.08	193%	Ecology Embankment	1755	5750
A1	A1.2	4030 - 4045 (16.28 - 16.57)	0.97			Ecology Embankment	1541	6164
A2	A2.1	4045 - 4052 (16.57 - 16.69)	0.73	0.44	316%	Ecology Embankment	633	2532
A2	A2.2	4053 - 4060 (16.83 - 16.84)	0.66			Ecology Embankment	579	2300
B4	B4.1	4130 - 4134 (18.16 - 18.25)	1.28	0.35	863%	Ecology Embankment	466	1864
B4	B4.2	4138 - 4151 (18.34 - 18.58)	1.74			Ecology Embankment	1245	4980
C1	C1.1	4151 - 4192 (18.58 - 19.36)	8.23	9.61	130%	Ecology Embankment	4111	16444
C1	C1.2	4179 - 4205 (19.10 - 19.67)	4.24			Ecology Embankment	2584	10336
D1	D1.1	4219 - 4224 (19.85 - 19.90)	3.69	0.75	492%	Ecology Embankment	490	2450
D3	D3.1	4281 - 4301 (21.06 - 21.40)	3.50	0.53	660%	Ecology Embankment	1790	7160

Basin Name	Facility I.D.	Sta to Sta (MP to MP)	Contributing EIS Area (ac)	New Pavement Area (ac)	% Treatment of Pavement Area	Facility Type	Facility Length (ft)	Facility Size Area (sf) *
D4	D4.1	4301 - 4310 (21.07 - 21.57)	1.85	0.47	664%	Ecology Embankment	1533	6132
D4	D4.2	4305 - 4320 (21.48 - 21.77)	1.27			Ecology Embankment	815	3260
E1	E1.1	4320 - 4342 (21.77 - 22.18)	2.99	0.83	360%	Ecology Embankment	2080	8320
E2	E2.1	4342 - 4357 (22.17 - 22.46)	2.41	0.97	413%	Ecology Embankment	1496	5984
E2	E2.2	4349 - 4358 (22.31 - 22.48)	1.60			Ecology Embankment	900	3600
F1	F1.1	4358 - 4364 (22.48 - 22.60)	1.48	0.23	643%	Ecology Embankment	680	2720
F3/4	F3/4	4400 (23.25)	13.98	0.79	1770%	Comb. Wetland	NA	1343
Water Quality Totals			51.73 ac	16.05 ac	322%			91,339

* For ecology embankments, facility size calculated as length of ecology embankment multiplied by 4 feet (min. embankment width)

Response to Comment CC 7-13

Stormwater discharges to this Forbes Creek tributary are managed by the use of a flow control BMP (stormwater detention pond) and water quality BMPs (ecology embankments) constructed in this section of the project alignment. Geotechnical analyses were performed for this threshold discharge area to determine the feasibility of stormwater infiltration. Poor infiltrating soils were encountered in this area, thus prohibiting the possibility of infiltrating BMPs.

Response to Comment CC 7-14

Stormwater is managed to avoid increases in flow frequencies and durations to receiving waters that contain salmonids to avoid potential impacts in all threshold discharge areas of the Kirkland Nickel Project. See response to comment CC 7-12.

Response to Comment CC 7-15

The existing in-stream detention facility at Juanita Creek is the property of King County. Kirkland Nickel Project improvements will have no impacts to the County's existing in-stream detention facility or the associated cross culvert. The Kirkland Nickel Project will create no in-stream stormwater facilities.

Response to Comment CC 7-16

The lack of natural stream habitat functions and values upstream of the freeway is a key factor when assessing fish passage needs. Fish passage decisions are not made based on downstream habitat functions and values or barriers, or the lack of habitat outside of the project area. Like many natural stream channels, the Forbes Creek culvert has limited capacity with respect to large woody debris transport. This is one reason for instream placement (mitigation) of large woody debris when the project is constructed; to place the type of large woody debris pieces that are transported on extreme flood events. The culvert will still be able to transport large woody debris, just not the largest pieces. The culvert must be designed to perform natural stream functions, such as sediment transport and flood conveyance during 100-year flow events per state of Washington fish passage standards.

Response to Comment CC 7-17

Culverts No. 5, 19, 20 (Forbes Creek), 22, 28, and 29 convey natural waters. Fish passage at No. 20 (Forbes Creek) will be restored. The other culverts lack habitat values either upstream or downstream (outside) of the project (i.e., no open channel habitat).

Response to Comment CC 7-18

The technical details and plans will be developed by the contractor who constructs the site. The restoration requirements will be outlined by the regulatory agencies in the permits for the project. It is expected that the permit requirements will include the best available science and techniques.

Response to Comment CC 7-19

Stormwater facilities are designed in accordance with the WSDOT Highway Runoff Manual and all other applicable state and local stormwater guidelines and standards. Flow control treatment BMPs will be employed for each threshold discharge area meeting or exceeding the minimal threshold values for new impervious surface. At a minimum, flow control is provided for 100 percent of the new impervious surface constructed as part of the Kirkland Nickel Project. Additionally, water quality treatment BMPs will be provided to meet and exceed the minimum treatment levels for each of the affected threshold discharge areas.

Response to Comment CC 7-20

The Salmon Steelhead Habitat Inventory Project is cited in the EA (2001b) as was the WRIA 8 Reconnaissance Report. They both were summarized in the discipline report and the information was drawn from that report rather than the original documents. See comment CC 7-5 for SalmonScape reference. WDFW neither surveys these streams nor do they have updated or accurate index counts. King County citizen

volunteers survey them, and their database and database managers were included in the assessments.

Response to Comment CC 7-21

Please see the response to comment CC 7-4.

Response to Comment CC 7-22

Please see comment CC 7-1 for the reference materials used for a level-1 criteria to determine whether a level-2 criteria (velocity, drop, plunge pool depth, culvert width, gradient, etc.) should be assessed. All life stages for all fish species were considered at all culverts.

Response to Comment CC 7-23

King County in its protocols defines “large” with the dimensions at 25.4 cm (10 inches) in diameter and 3.1 meters or 10 feet in length. The University of Washington Center for Water and Watershed Studies defines large woody debris as a log having a mid-point diameter of at least 10 cm, and a length of 2 m (see <http://depts.washington.edu/cws>). Fox (2003) reports large woody debris in four different diameters (10-20 cm, 20-50 cm, 50-70 cm and 70 cm) (see cwws@u.washington.edu). Dooley and Paulsen (1998) note, “The definition of large woody debris has evolved in the scientific, regulatory and political arenas to include wood as small as four inches in diameter and six feet in length. However, the preferred sizes are 18-36 inches in diameter and 12-32 feet in length.” Thus the dimensions of “large” vary. For the purposes of this study the King County protocols were used.

Response to Comment CC 7-24

The purpose of this study was to determine the fish habitat functions and values within 300 feet of the project. While the sampling periods did not necessarily correspond to the months when anadromous fish might be present, the evaluation of the habitat and determination of its value led to a qualitative determination of presence recognizing that one cannot prove absence. With respect to barriers downstream, this study determined impacts of the proposed project as well as measures to ensure avoidance or mitigation of the project impacts. The purpose of this study was to identify and remove all barriers downstream, natural or manmade, which go beyond the purview of this project.

WSDOT made the assumption that there is fish life in all natural waters, even above natural barriers and unnatural steep gradients. Resident populations seed lower stream reaches and, therefore, also require passage.

Response to Comment CC 7-25

Coho definitely use the lower reaches of Yarrow Creek. However, they are not found within the project study area.

Response to Comment CC 7-26

The culvert is included in another I-405 Corridor Project (Bellevue). WSDOT will evaluate the fish passage needs (for Yarrow Creek) as a part of the Bellevue Nickel Improvement Project.

Response to Comment CC 7-27

The only fish observed in the study area are presumed to be cutthroat trout. “Fish” are noted in Table 4-1 in the EA, primarily because the salmonids observed during the surveys were not captured and identified.

Response to Comment CC 7-28

We agree. Given the length of each of the segments and the amount of large woody debris found in each segment, the word “extensive” is not appropriate. It has been deleted. See Errata.

Response to Comment CC 7-29

Because of the non-WSDOT barriers downstream of the project, the literature information (The Watershed Company, 1998), and observed swimming behaviors, we presumed that the fish that were observed were cutthroat. The Watershed Company conducted electroshocking and identified cutthroat as the predominant fish species and the only salmonid in this same stream reach.

We agree that coho probably used this habitat historically, but under existing basin or stream conditions, access is limited to downstream movements only (i.e., outplants or trap-and-haul operations). Additionally, excessive deposition of fines would limit survival.

Response to Comment CC 7-30

Stream gradient is important data for assessing upstream fish passage and characterizing a stream. Gradient was assessed by the survey crews, but not measured with a grade stick. The WSDOT survey crews and fisheries biologists are experienced and accurate in assessing gradient.

Response to Comment CC 7-31

The Watershed Company surveyed this stream reach in 1997 and found no fish species. The open channel section could support resident species such as cutthroat or sculpins if supplemented. The number of cutthroat spawning pairs would likely be limited to one to four pairs because of summer low flows that limit the amount of riffle and pool habitat.

Response to Comment CC 7-32

The downstream segment of the survey quantified 33 pieces within the 296 feet (90 meters) of surveyed stream. Upstream, Forbes Creek is essentially without large woody debris.

Response to Comment CC 7-33

The survey did not extend to the mouth of the creek or to river mile 0.2. Under existing conditions, sockeye or coho would not be expected near the project because of non-WSDOT barriers below the project. The sockeye observed during spawning surveys were located in the lower reaches of Forbes Creek. The salmonids observed near the project are likely cutthroat that are progeny from spawning adults upstream of the freeway (The Watershed Company, 1998; King County, 1998). The juveniles and sub-adults can migrate downstream in the existing culvert.

Restoring the Forbes Creek culvert will allow coho or sockeye upstream migration once the other non-WSDOT barriers are fixed.

Response to Comment CC 7-34

Juanita Creek is considered to be Evolutionarily Significant Unit Chinook critical habitat because of the species historic range. Chinook have not been documented in Juanita Creek for several years. The other salmon species you reference have been noted and documented in the EA.

Response to Comment CC 7-35

The Watershed Company, 1998; King County grey literature reports (1996-1998); and SalmonScape were referenced.

Response to Comment CC 7-36

WSDOT recognizes the value of fish life in Juanita Creek. There are no project activities that involve the main fork of Juanita Creek. WSDOT included these areas in the fish habitat assessment because they were in the project action area.

Response to Comment CC 7-37

Based on aerial topographic survey information, stream KL14 has an average gradient of approximately 9-percent slope through the ravine portion. It is not known if steeper sections exist within this stretch, or if any natural barriers to fish passage exist.

Response to Comment CC 7-38

This is a reference to structural barriers. WSDOT addressed thermal barriers in the Kirkland Nickel Project Surface Water Discipline Report.

Response to Comment CC 7-39

Please see the responses to comments CC 7-1, CC 7-22, and CC 7-44.

Response to Comment CC 7-40

Noise impacts on fish species are a concern. In-water construction activities will be limited to the fish work windows and other conditions outlined in the regulatory permits.

Response to Comment CC 7-41

Kirkland Nickel improvements will be constructed outside of Yarrow Creek buffer areas. Stormwater from construction will be treated in accordance with local and state erosion control guidelines for TESC management. Permanent facilities will include a flow control treatment pond to release stormwater discharges from new pavement areas at rates and durations to match forested predeveloped conditions.

Response to Comment CC 7-42

The cross culvert design is based on the fish passage criteria developed and required by the fish management agencies. Also, see comment CC 7-40. WSDOT will abide by the monitoring requirements included in the permit conditions.

Response to Comment CC 7-43

Construction of headwalls at culvert outlets will have no stream constricting effect other than what is typically experienced at other culvert outlets. Construction of headwalls at culvert outlets serves to reduce the riparian impacts that would otherwise be experienced by a fill slope.

Response to Comment CC 7-44

Kirkland Nickel roadway improvements will add new impervious surfaces to 13 of the 18 threshold discharge areas along the project corridor. Treatment facilities for flow control and water quality will be provided for these threshold discharge areas to counteract the effects of the new pavement. Flow control treatment BMPs will be employed for each threshold discharge area to meet or exceed the minimal threshold values for new impervious surface. At a minimum, flow control is provided for 100 percent of the new impervious surface constructed as part of the Kirkland Nickel Project. Water quality treatment BMPs will be provided to meet and exceed the minimum treatment levels for each of the affected threshold discharge areas.

Additionally, some detention function will be obtained within the ecology embankment infiltration media to hold runoff and slow its progress. This will further serve to reduce peak runoff rates and extend flow durations from the associated drainage areas. Because these features mimic flow conditions of the forested predeveloped condition, it follows that base flows in the associated streams will not be adversely affected by their use.

Response to Comment CC 7-45

The Memorandum of Understanding documents are found on the WSDOT Environmental Procedures Manual, Exhibit 436-2 at Web site www.wsdot.wa.gov/fasc/EngineeringPublications/Manuals/EPM/436.pdf. The other documents are listed in comment CC 7-1.

Response to Comment CC 7-46

Additional information is recorded in Table 1 of the Kirkland Nickel Project Supplemental Stream Habitat Survey Report in Appendix W of the EA.

Response to Comment CC 7-47

These streams are referenced in the report:

- C5 is an ephemeral tributary to Yarrow Creek.
- C18, C19, and C22 are tributaries and drainages to Forbes Creek.
- C28 and C29 are tributaries to Juanita Creek.
- KL 14 is a tributary to the Sammamish River.

Response to Comment CC 7-48

Flows from C-5 originate from a small wetland area within the right of way and shoulder area. Summer low flows are limited to less than 0.01 cfs.

C-19 is not a fish passage barrier. The natural channel habitat features below the culvert, such as a steep gradient and shallow plunge pools represent natural barriers.

The flows from C-28 and C-29 also originate from (springs) within the existing freeway footprint. There is neither functioning open water habitat nor stream channel upstream of the freeway.

Response to Comment CC 7-49

Stream gradient was assessed but not calculated. It is common for experienced field crews to not measure gradient unless it is approaching fish passage thresholds. Gradient can also be calculated using GIS tools and topographic maps. If the information is critical it is easy to calculate.

Response to Comment CC 7-50

Downstream of the project area (estimate of 1,000 feet) Forbes Creek drops down into a 10-foot grated catch basin that conveys flows underneath a parking area for 300 feet (estimate). The stream outlets onto a riprap drop zone (7-foot drop) and then flows into the natural channel below. The Watershed Company, 1998, and the Kirkland Public Works Departmental documents served as reference materials for this section of the stream.

Response to Comment CC 7-51

This is a function of stream gradient, which was not calculated, and lack of cover or pool habitat. The statement is based on an experienced fisheries biologist's professional judgment.

Response to Comment CC 7-52

Please see response for CC 7-51.

Response to Comment CC 7-53

WSDOT intends to restore fish passage where there is functioning habitat upstream of the cross culverts. The lack of functioning upstream habitat includes little to no open stream channel, minimal flows, no scour activities, no riparian and, therefore, the inability to recruit large woody debris, or generate gravel materials for habitat-forming processes. The assessments determined that under existing conditions and in

the future, there is minimal to no eco-connectivity. Where large woody debris transport is possible, WSDOT is seeking to restore fish passage.

Response to Comment CC 7-54

WDFW was consulted and concurred with the WSDOT assessments. WSDOT is required to follow Washington State laws regarding assessment and maintenance of fish passage barriers. A Memorandum of Understanding (MOU – June 2002) has been developed based on the best technical information available and WSDOT has agreed to follow the guidance, rules and regulations outlined in the MOU.

Response to Comment CC 7-55

Culvert C-18 has a current length of approximately 190 feet.

Response to Comment CC 7-56

Stream C-18 is connected to Forbes Creek at approximate milepost 19.0. Water quality in Forbes Creek will be improved by the implementation of flow control and water quality treatment features. Regarding the stream at C-18, water quality treatment will be provided by ecology embankments constructed along new pavement sections on the west side of I-405. These ecology embankments will treat new pavement areas plus contributing adjacent, existing freeway pavement, thus improving the level of water quality treatment over what currently exists. Additionally, ecology embankments will capture and slow the initial flush of storm runoff, providing a level of detention function to reduce peak runoff rates and extend flow durations from the contributing areas. Although detention exists within the ecology embankment sections, WSDOT does not claim these volumes as a means to reduce detention volumes in the flow control facilities, but provides this volume over and above the minimum requirements.

Response to Comment CC 7-57

Culvert C-19 has a current length of approximately 214 feet.

Response to Comment CC 7-58

No overflow channel will be included as part of the C-19 flow control and conveyance system. All pond discharges to C-19 streams and culverts will continue to be conveyed east (under the freeway) to Forbes Creek. Ecology embankments constructed along the western edge of the new freeway pavement areas will intercept sheet flows from the freeway and slow the initial flush of storm runoff. A small level of detention function exists within the pore spaces of the ecology embankment filter media and underdrain system, which, in turn, provides a small level of attenuation to reduce peak runoff rates and extend flow durations from the contributing areas. Following treatment in the ecology embankment, runoff will proceed to the detention pond for flow control treatment. No detention credit is taken from the ecology embankments.

Response to Comment CC 7-59

The habitat functions associated with C-19, such as flow, riparian, or channel meanders do not occur within this tributary subbasin. Natural contours created this

subbasin and stream system within the freeway right of way. WSDOT is applying stream habitat technical terms to an upper basin that is less than 10,000 square feet.

The habitat values were measured and the project impacts documented. The loss of functions will be mitigated through other Forbes Creek fish passage improvements.

Response to Comment CC 7-60

Culvert C-22 will be replaced because the overlying freeway section will undergo profile changes that impact the existing culvert. Additionally, the existing culvert is nearing the end of its design life, and the proposed road work provides the impetus to reconfigure and upgrade the existing conveyance system. Proposed culvert C-22 will collect and convey runoff from off-site drainage areas to the east and from treated (ecology embankment) on-site freeway surfaces lying to the south. C-22 will not receive or convey untreated freeway runoff.

Response to Comment CC 7-61

Stormwater treatment methods discharging to streams C-19 and C-22 include flow control and water quality BMPs provided in the WSDOT Highway Runoff Manual. Flow control treatment BMPs will be employed to meet or exceed the required threshold values for new impervious surface. At a minimum, flow control is provided for 100 percent of the new impervious surface constructed within the threshold discharge area. Water quality treatment will be provided by ecology embankments constructed along new pavement sections on the west side of I-405. These ecology embankments will treat new pavement areas plus contributing adjacent, existing freeway pavement, thus improving the level of water quality treatment over what currently exists. Additionally, some detention function will be obtained within the ecology embankment infiltration media to hold runoff and slow its progress. This will further serve to reduce peak runoff rates and extend flow durations from the associated drainage areas. These features mimic flow conditions of the forested predeveloped condition and counteract impacts from the new impervious surfaces.

Response to Comment CC 7-62

Culvert C-28 has a current length of approximately 145 feet. The estimated square footage for the rip rap/boulder cascade at the outlet is approximately 360 square feet. The impact is beneficial to fish habitat because it counteracts and repairs an existing erosion hazard caused by the extensive head cutting currently experienced at the culvert outfall.

Response to Comment CC 7-63

The existing culvert has a severe vertical and horizontal headcut. The erosion associated with the headcut is greater than 8 feet vertical and 15 feet horizontal. A bioengineered outlet is planned, which would eliminate erosion and thereby reduce sediment loading downstream. By reducing the unnatural deposition of fines, the productivity factor is likely to increase through natural scour events that would expose more gravels and cobbles for macro invertebrates to use.

Response to Comment CC 7-64

Stormwater improvements to the contributing area for stream C-28 include a flow control pond, water quality ecology embankments, and upgrades to existing conveyance features. The existing stormwater pond facility will be expanded to include additional flow control for the new pavement with some additional level of water quality enhancement. Ecology embankments will provide water quality treatment for new pavement, as well as adjacent existing freeway pavement that contributes runoff over the new pavement, thus improving the level of water quality treatment over what currently exists.

Response to Comment CC 7-65

C-29: Stream impacts equal 140 square feet. The other aquatic environments have been declared non-jurisdictional by the U.S. Army Corps of Engineers and WDFW, primarily because they have been constructed or are man-made and retain very few natural functions.

Response to Comment CC 7-66

The combined detention/wetland facility proposed for the Sammamish Basin will receive storm runoff from the freeway pavement surfaces. Off-site areas will be routed around the detention system and remain in either the KL14 ravine, or collected in the off-site bypass system discharging directly to the Sammamish River.

Stormwater runoff from the freeway surface represents a very small percentage of the overall flow released from this drainage area. Runoff from the freeway/stormwater facility will develop in response to rainfall events and typically cloudy periods of relatively low solar activity. Additionally, discharges from the storm facility will be designed to match the hydroperiod for the predeveloped condition and generally correspond with elevated flows from the Sammamish basin at large. During summer, very little runoff would be expected from the stormwater facility during periods of temperature impairment to water quality in the Sammamish River.

Response to Comment CC 7-67

Culvert or Stream	Stream Impacts (SF)		Riparian Impacts (SF)	
	Temporary	Permanent	Temporary	Permanent
C-5	-	2,040	-	2,000
C-19	-	80	-	3,000
C-20 (Forbes Ck)	1,000	100	4,000	-
C-21	-	0	-	600
C-29	-	140	-	-
Total	1,000	2,360	4,000	5,600

Compensatory mitigation: See comment CC 7-11

Response to Comment CC 7-68

Chapter 4.3 (Wetland Determinations) is organized by stream basin as indicated by the third order headings. For example 4.3.1 describes wetlands associated with

Yarrow Creek, 4.3.2 describes wetlands associated with Forbes Creek, 4.3.3 describes wetlands associated with Juanita Creek, and 4.3.4 describes wetlands associated with the Sammamish River. In addition, the location of each wetland and stream is shown on Figure 2 (although the streams are not labeled). Information relative to which wetland is associated with a riparian corridor is located in Appendix B and is summarized in Table B-1. The commenter should note that the descriptions of hydrologic associations with streams in Chapter 4 relate to the jurisdictional nature of the wetland and do not necessarily mean that the wetland is associated with a stream in the manner that they describe (relative to habitat forming processes). Table B-1 identifies that six of the wetlands have a riparian association. Only two wetlands with riparian associations will be impacted by the project (19.3R and 22.8).

Response to Comment CC 7-69

Each of these wetlands occur on the upstream side of I-405 at or near where the associated streams are culverted under the highway. Each wetland was rated based on its potential to provide beneficial functions and values per Null (2001) as required by the WSDOT Environmental Procedures Manual. Only wetland 22.8 was noted as having the likelihood of providing beneficial functions relative to fish habitat. Impacts related to fish habitat and associated mitigations are discussed in detail in the Kirkland Nickel Project Fish and Aquatic Resources Discipline Report.

Response to Comment CC 7-70

Comment noted. WSDOT has prepared a site-specific Draft Wetland Mitigation Plan (WSDOT, 2005) that describes proposed mitigation for wetland areas based on their current implementing agreement with Ecology. This plan has been submitted to regulatory agencies with jurisdiction over wetlands as part of the appropriate permit applications. The Draft Wetland Mitigation Plan is part of the public record for this project and is available for review and comment as are other submittal documents pursuant to public notification requirements of each agency. Information on U.S. Army Corps of Engineers Current Public Notices can be found at www.nws.usace.army.mil/PublicMenu/Menu.cfm?sitename=REG&pagename=PublicNotices.

Information on Department of Ecology Public Notices can be found at www.ecy.wa.gov/programs/sea/fed-permit/NWRO_PNs.html. Public notices are currently available regarding the Kirkland Nickel Project.

Insert Department of Ecology Comments (3 pages)

Responses to Comments from the Department of Ecology

Response to Comment CC 8-1

Although the corridor EIS and Record of Decision are mentioned, the public involvement discussion in Chapter 3, Developing the Alternatives, focuses on activities associated with the Kirkland Nickel Project, not the entire corridor. The chapter describes the numerous opportunities that citizens have had to comment on the project and work with WSDOT to refine it.

Response to Comment CC 8-2

The intent of the reader-friendly document is to provide an overview of the elements of the environment, potential project effects, and measures to avoid or minimize effects. In each section we refer the reader to the appended discipline reports for more detailed information.

Response to Comment CC 8-3

Comment noted. This statement has been changed to read, “There are thirty-three wetlands located in the project area.”

Response to Comment CC 8-4

The sidebar language will be replaced with the following:

“Both state and local resource agencies rate or categorize wetlands according to their relative rarity or importance. Wetlands are differentiated based on their sensitivity to disturbance, their significance, their rarity, our ability to replace them, and the beneficial functions they provide to society.”

Response to Comment CC 8-5

As noted in the response to Comment 8-2, more detailed information concerning wetlands is found in the appended Kirkland Nickel Project Wetlands Discipline Report. Wetland functions are described in Section 4.3 of the discipline report.

Response to Comment CC 8-6

The reviewers point regarding the use of qualifiers like “poor” is noted. We have retained the use of “low, medium, and high” because this parallels the discussion of the various categories of wetlands found in Hruby (2004), the revised rating system for Western Washington. We feel that the format of the EA does not lend itself to the kind of specific discussion that is recommended by Ecology. While the recommended language change would be meaningful to knowledgeable professionals who are familiar with the classification system, simply saying that 12 of the 14 wetlands were classified as Category IV wetlands would be meaningless to a layperson without a lengthy discussion of the various wetland ratings, classification systems and functional assessment methods. Specific discussion can be found in the Kirkland Nickel Project Wetland Discipline Report (Appendix U), and interested readers can have access to the more detailed analysis if they desire. The referenced paragraph will be revised as follows:

“Because of a long history of disturbance from past roadway construction and other development, wetland quality in the I-405 Corridor has been degraded from what would be expected under a natural condition. Twelve of the 14 affected wetlands in the Kirkland Nickel Project area can be characterized as lower-functioning wetlands. Lower-functioning wetlands are typically associated with ditches alongside the road. The remaining wetlands can be characterized as moderate-functioning wetlands. These wetlands provide some water quality improvement and habitat value, but do not provide a high level of benefits to society. Exhibits 5-36 and 5-37 are examples of these types of wetlands. The larger medium- or high-valued wetlands, which provide more habitat functions, are usually more natural, occur outside the WSDOT right of way, and will not be affected.”

Response to Comment CC 8-7

This statement is true in that a majority of the wetlands that will be filled are roadside wetlands that have been modified by the construction of ditches and stormwater detention facilities. To clarify this point, the paragraph will be revised as follows:

“When the I-405 roadway is widened, wetlands totaling 1.6 acres will be permanently filled. The majority of these wetlands are located adjacent to the roadway and are lower-valued wetlands that were ditched or otherwise disturbed during the original construction of I-405.”

Response to Comment CC 8-8

This paragraph does not state that all wetlands are ditches. The paragraph is factually correct in that the majority of the wetlands that occur along the road have been ditched and are associated with stormwater conveyance or treatment facilities. To clarify this point, the paragraph has been combined with the preceding paragraph and revised as follows:

“When the I-405 roadway is widened, wetlands totaling 1.6 acres will be permanently filled. The majority of these wetlands are located adjacent to the roadway and are lower-valued wetlands that were ditched or otherwise disturbed during the original construction of I-405. Water from these wetlands typically flows into culverts that extend beneath I-405 or adjacent roads, or into storm drains.”

Response to Comment CC 8-9

“Acres of Mitigation” in Exhibit 5-39 refers only to acres of wetlands. It does not include buffers.

Response to Comment CC 8-10

The discussion of time frames has been removed. The sentence has been revised to read, “However, temporary effects can result in a short-term loss of wetland functions following construction.”

Response to Comment CC 8-11

In reference to the paragraphs noted in the comment, the preceding discussion identifies that mitigation will be done in accordance with federal, state and local requirements. The discussion referenced in the comment relates to the coordination process that was followed to reduce impacts and choose appropriate mitigation sites. It does not relate to how mitigation requirements were determined. To clarify this, the section will be revised as follows:

“The Kirkland Nickel Project mitigation strategy includes coordination with local governments to select projects that meet federal, state, and local regulatory requirements and that would provide substantially greater functions and values than the affected wetland. The mitigation strategy must satisfy all requirements of each federal, state, and local jurisdiction to compensate for the respective loss of wetlands within the Kirkland Nickel Project area (Exhibit 5-39). WSDOT has worked with the federal, state, and local agencies (including the cities of Kirkland and Bothell, as well as King County) to coordinate activities to avoid or minimize effects to wetlands within their respective jurisdictions.

Despite WSDOT’s efforts to avoid wetlands during construction, 0.18 acres of wetlands will be temporarily disturbed, which the contractor will be required to restore. An additional 1.6 acres of wetlands will be permanently filled. The acreage of filled wetlands is distributed among local jurisdictions accordingly:

- Kirkland – 1.229 acres
- Bothell – 0.136 acres
- Unincorporated King County – 0.235 acres

Three sites (Exhibit 5-40) will be used to provide the required wetland mitigation to replace filled wetlands. These sites provide adequate area according to replacement ratios of each federal, state, and local jurisdiction to fully mitigate for the filled wetlands.”

Response to Comment CC 8-12

The details pertaining to mitigation are provided in the wetland mitigation plan that has been provided to the MAP Team for review. The mitigation plan discusses the wetland functions to be replaced.

Response to Comment CC 8-13

The text on page 6-11, starting with the first complete sentence, has been changed to read:

“Approximately 0.18 acres of wetlands will be temporarily affected because of construction activities and approximately 1.6 acres of wetlands will be permanently filled (Exhibit 6-3). The distribution of permanently filled wetlands by watershed will be Forbes Creek – 1.064 acres, Lake Washington East/Bellevue North – 0.096 acres, Juanita Creek – 0.304 acres, and Sammamish River – 0.136 acres.

Based on the mitigation that will occur to compensate for the loss of 1.6 acres, a positive contribution to cumulative effects (more wetlands created or enhanced than filled or permanently impacted) to wetlands within the affected areas can be realized as a result of the construction of the Kirkland Nickel Project.”

Attachment 6

Public Hearing Comments and Responses

At the public hearing held on March 15, 2005, we obtained comments regarding the I-405, SR 520 to SR 522 – Kirkland Nickel Project EA in three forms:

- From participants submitting written statements at the hearing;
- From oral comments and questions recorded by project team members at the hearing; and
- From testimony recorded by a court reporter (the hearing transcript responses to comments can be found in Attachment 7).

In some cases, the same response is appropriate for similar comments. When this occurs, the response will make a reference to the first time the response is presented in this document (i.e., See Response to Comment WC-3).

Index to Comments

Written Comments (WC) (using hearing form)

Nielsen, Carol (WC 1-1)
Finnegan, Lon and Isla (WC 2-1 through 2-4)
Forster, Ron (WC 3-1)
Residents of 114th Avenue, NE (WC 4-1)
Ralston, Atley (WC 5-1)
Nouwens, Jeff (WC 6-1)

Oral Comments (OC) (given at the hearing)

Carrie at KIA of Kirkland (OC 1-1)
Finnegan, Mr. and Mrs. (OC 2-1)
Hansink, James (OC 3-1)
Kirkland Planning Commission Member (no name) (OC 4-1)
Munro, Bill (OC 5-1)
Young, Robert (OC 6-1)

Insert written comment forms from Carol Nielsen (2 pages)

Responses to Written Comments (WC) Received at the Public Hearing on the EA

Response to Comments from Carol Nielsen

Response to Comment WC 1-1

Noise walls are proposed in all areas that meet WSDOT feasibility and reasonableness criteria. Noise walls are not constructed where noise levels are not predicted to approach or exceed the FHWA noise abatement criteria (67 dBA) at nearby sensitive receptors.

Quieter paving material for use in the state of Washington is being evaluated, but its use is not anticipated at this time.

Revegetation and restoration will be provided in areas that are disturbed during construction. Vegetation provides very little benefit in reducing noise. For example, an area of dense vegetation 100-feet thick is needed to provide a noticeable reduction in noise propagation.

Insert comments from Isla and Lonnie Finnegan (2 pages)

Response to Comment from Lon and Isla Finnegan

Response to Comment WC 2-1

Noise walls are proposed in all areas that meet WSDOT feasibility and reasonableness criteria. Noise walls are not constructed where noise levels are not predicted to approach or exceed the FHWA noise abatement criteria (67 dBA) at nearby sensitive receptors. The decision on whether or not to include a noise wall in any project that adds roadway capacity is made according to WSDOT's policy on noise barrier feasibility and reasonableness. Determination of feasibility and reasonableness for noise wall construction is discussed in the Kirkland Nickel Project Noise Discipline Report.

Insert comments from Ron Forster (2 pages

Response to Comment from Ron Forster

Response to Comment WC 3-1

Comment noted.

Insert comment from residents at 114th Avenue (2 pages)

Response to Comment from Residents of 114th Avenue NE

Response to Comment WC 4-1

Noise was modeled at two locations near 114th Avenue NE, receptors 17 and 19. The results of the modeling indicated that current noise levels range between 59 and 61 dBA. Year 2030 noise levels with construction of the Kirkland Nickel Project were also modeled at these two receptors with noise levels ranging between 61 and 62 dBA. These noise levels are below the WSDOT noise abatement criteria threshold of 67 dBA for consideration of new noise walls. Noise walls are not constructed where noise levels are not predicted to approach or exceed the FHWA noise abatement criteria (67 dBA) at nearby sensitive receptors.

Insert comments from Atley Ralston (2 pages)

Response to Comment from Atley Ralston

Response to Comment WC 5-1

Newer, more quiet, pavement types have not been evaluated specifically for this project. WSDOT conducts tests of newer pavement materials as they become available and evaluates them for noise reduction, wear, safety, cost, and other factors.

Insert comments from Jeff Nouwens (2 pages)

Responses to Comments from Jeff Nouwens

Response to Comment WC 6-1

Noise was modeled at two locations near your home, receptors 17 and 19. The results of the modeling indicated that current noise levels range between 59 and 61 dBA. Year 2030 noise levels with construction of the Kirkland Nickel Project were also modeled at these two receptors with noise levels ranging between 61 and 62 dBA. These noise levels are below the WSDOT noise abatement criteria threshold of 67 dBA for consideration of new noise walls. Noise walls are not constructed where noise levels are not predicted to approach or exceed the FHWA noise abatement criteria (67 dBA) at nearby sensitive receptors.

Response to Comment WC 6-2

Much of the construction on I-405 will take place at night to minimize conflicts with traffic.

Response to Comment WC 6-3

The proposed Kirkland Nickel Project drainage improvements will likely improve the quality of water draining from I-405. Currently, freeway runoff to this drainage course flows quickly from the expanse of pavement surfaces, resulting in high peak flows, dislodged sediment and debris, clogged structures and localized downstream flooding. Proposed improvements will include a detention vault in the WSDOT right-of-way to capture freeway runoff and release flows at a reduced rate from the current situation. This will reduce the scour in the drainage ravine, allowing it to stabilize and should greatly reduce localized flooding. Additional water quality features (ecology embankments) will also slow the flow of runoff from the freeway while treating it to remove entrained metals and oil.

Response to Comment WC 6-4

Considering the responses above, additional noise measurements and soil testing are not planned for your neighborhood.

Oral Comments (OC) Received by Project Staff at the Public Meeting on the EA and Responses

Comment from Carrie at KIA of Kirkland

Comment OC 1-1

Carrie was interested in the southbound on-ramp from NE 116th Street, which is behind the KIA dealership. She was most interested in how our projects would affect the visibility of the dealership from I-405.

Response to Comment OC 1-1

We emailed several image files to Carrie on March 16, 2005, showing enlargements of the KIA property with Stage 1 and Stage 2. We also included cross sections so she could get a feel for the finished project lay of the land, and the height of the proposed retaining wall along the on-ramp (back of the KIA property).

Comments from Mr. and Mrs. Finnegan

Comment OC 2-1

We will evaluate changes in the berm height. During construction it may be possible to add soil materials to the top of the berm.

Response to Comment OC 2-1

We will look into adding material to the berm if it can be accomplished during construction of the project.

Comment OC 2-2

A neighbor's house (apparently two to three houses to the north) has more water now, seeping into their back yard than ever before. The seepage appears to be coming from the toe of the freeway prism. The neighbor apparently built a 4-inch perforated pipe collection system and direct the drains onto their (the neighbor) property. Mr. Finnegan was concerned that the seepage problems may get worse, for the neighbor as well as their own yards.

Response to Comment OC 2-2

This may be a maintenance issue. We will send our local maintenance crew out to see if the highway is responsible for the increase in water. Stormwater management for the proposed project will rectify this situation.

Comment OC 2-3

They were interested in trying to cover up the open half pipe that drains from one of the cross culverts. The open pipe is adjacent to their property. They have had safety issues with children and pets.

Response to Comment OC 2-3

See response to Comment OC 2-2.

Comment OC 2-4

They made statements regarding the planting of tall canopy trees on the berm behind their yard. They prefer a planting of high density thick conifers, not the deciduous trees or small shrubs.

Response to Comment OC 2-4

Comment noted.

Comment from James Hansink

Comment OC 3-1

We talked to Mr. Hansink regarding his property at 6124 114th Ave NE. He has his home on the market, and is concerned that future projects will require property acquisition. Mr. Hansink also mentioned that he thought the existing noise wall along his backyard was really effective.

Response to Comment OC 3-1

We will email Hansink a PDF file showing his property with construction stage 1, stage 2 and the implementation plan as we know it. The exhibits will contain a verbal description of each project and anticipated impacts to his property. This same information has been emailed to several property owners along the project.

Comment from Kirkland Planning Commission Member (no name)**Comment OC 4-1**

The commission member was interested in Forbes Creek issues. She asked about other downstream fish barriers. She did not realize that cutthroat use the stream now. She asked about cost and opportunity to restore passage in the parking lot area downstream of the project area. She praised WSDOT for their current proposal to restore fish passage at Forbes Creek.

Response to Comment OC 4-1

Comment noted.

Comment from Bill Munro**Comment OC 5-1**

Why doesn't the EA analyze the impacts of the proposed Sound Transit Freeway Station and Pedestrian Overpass at NE 128th Street and I-405 on driver safety, including the potential for obscuring the view of the road ahead for drivers southbound on I-405? The EA mentions the Sound Transit Freeway Station, but does not analyze its impacts.

Response to Comment OC 5-1

Sound Transit prepared a NEPA Environmental Assessment for their Totem Lake Freeway Station/NE 128th Street Project to document the environmental effects of its project. There has been close coordination between Sound Transit and WSDOT to ensure that the design and operation of the Totem Lake Freeway Station/NE 128th Project and Kirkland Nickel Project are compatible. Both projects are being built to current design standards that consider safety factors such as sight distance and drivers' line of vision.

Comment from Robert Young**Comment OC 6-1**

Mr. Young owns the property located at 6310 114th Avenue NE. He is interested in purchasing additional property adjacent to his parcel from WSDOT, which would allow him to subdivide his property and build a second house. He was told that he would be contacted by Regina Raichart, right of way specialist for the project.

Response to Comment OC 6-1

Mr. Young's request and contact information were emailed to Regina Raichart. On March 16, 2005, Regina emailed Mr. Young about the process of acquiring WSDOT excess parcels.

Attachment 7

Hearing Transcript and Responses

The following pages provide the official hearing transcript of the Kirkland Nickel Project Environmental Assessment Public Hearing held on March 15, 2005 at the City of Kirkland Maintenance Facility at 915 Eighth Street in Kirkland, Washington, between 4:00 and 7:30 PM. Our responses to public testimony offered at this hearing begin on page A-124, following the transcript.

Index to Transcript Testimony (TT)

Latta, Christina (TT 1-1 through TT 1-5, transcript page 4)
Finnegan, Lonnie (TT-2-1 through TT 2-3, transcript page 12)
Crampton, Betty Lou (TT 3-1, transcript page 21)
Blanton, Carrie (TT 4-1 through TT 4-3, transcript page 22)

Insert transcript here (23 pages)

Signed signature page to be inserted

Responses to Transcript Testimony (TT) Received at the Public Meeting on the EA

Responses to Comments from Christina Latta

Response to Comment TT 1-1

Ms. Latta's residence is represented by receptor 61 in the Noise Discipline Report. Although you can clearly hear the traffic, noise levels neither currently, nor are they predicted in the future, to approach or exceed the noise abatement criteria of 67 dBA. Existing noise levels were modeled at 62 dBA, and 2030 noise levels with construction of the project were modeled at 64 dBA. Noise walls are not constructed where noise levels are not predicted to approach or exceed the FHWA noise abatement criteria (67 dBA) at nearby sensitive receptors.

Response to Comment TT 1-2

It is WSDOT policy to take noise measurement at the ground level and to provide noise abatement for ground level outdoor use. Also, the noise measurement for receptor 61 was taken in the backyard of 13940 133th Avenue, not in the access that dips down between Ms. Latta's home and 13940 133th Avenue.

Response to Comment TT 1-3

Noise measurements were taken to validate the noise model using the traffic volumes at the time of measurement. Loudest hour traffic volumes (highest traffic volume at posted speed limit) were used to estimate existing and future (2030) noise levels.

Response to Comment TT 1-4

Noise walls are proposed in all areas that meet WSDOT feasibility and reasonableness criteria. Noise walls are not constructed where noise levels are not predicted to approach or exceed the FHWA noise abatement criteria (67 dBA) at nearby sensitive receptors. The decision on whether or not to include a noise wall in any project that adds capacity is made according to WSDOT's policy on noise barrier feasibility and reasonableness. Determination of feasibility and reasonableness for noise wall construction is discussed in the Noise Discipline Report.

Response to Comment TT 1-5

Noise measurements were taken to validate the noise model using the traffic volumes at the time of measurement. Loudest hour traffic volumes (highest traffic volume at posted speed limit) were used to estimate existing and future noise levels.

Responses to Comments from Lonnie Finnegan

Response TT 2-1

Revegetation and restoration will be provided in areas that are disturbed during construction as well as other areas included in the landscaping plan. Vegetation provides very little benefit in reducing noise. For example, an area of dense vegetation 100 feet thick is needed to provide a noticeable reduction in noise levels.

Response to Comment TT 2-2

Noise measurements were taken to validate the noise model using the traffic volumes at the time of measurement. Loudest hour traffic volumes (highest traffic volume at posted speed limit) were used to estimate existing and future (2030) noise levels.

Response to Comment TT 2-3

Revegetation and restoration will be provided in areas that are disturbed during construction. Vegetation provides very little benefit in reducing noise. For example, an area of dense vegetation 100 feet thick is needed to provide a noticeable reduction in noise levels.

Responses to Comments from Betty Lou Crampton

Response to Comment TT 3-1

The WSDOT Traffic Manual, Section 2.4, defines the purpose of Primary Guide Signs as follows: “to direct motorists along state highways to exit points for principal destinations served by intersections or interchanges and to control cities that are located on intersecting state routes.”

Currently, Primary Guide Signs along southbound I-405 for Exit 16 read, “908 Redmond / NE 85th Street / Kirkland.” This series of signs will be modified to read: “NE 85th Street / Kirkland,” to clarify the street name and to designate Exit 16 as the primary exit for the City of Kirkland.

The WSDOT Manual on Uniform Traffic Control Devices, Section 2E.12, states that, “the direction of a freeway and the major destinations or control cities along it shall be clearly identified through the use of appropriate destination legends.” For this reason, a Supplemental Guide Sign will also be added along southbound I-405 (in advance of Exit 16) to read, “908 East / Redmond / Next Exit” because Redmond serves as a control city for SR 908.

Responses to Comments from Carrie Blanton

Response to Comment TT 4-1

I-405 project engineers spoke with Ms. Blanton regarding the construction around KIA of Kirkland at the public hearing on March 15, 2005. We emailed image files to Ms. Blanton on March 16, illustrating the proposed work around the property she represents. We have continued a dialogue with Ms. Blanton regarding the construction of the southbound on-ramp from NE 116th Street. We have scheduled a site visit with Ms. Blanton and the KIA of Kirkland management to help them visualize the appearance of the area upon project completion.

Response to Comment TT 4-2

Allowable closure times are dependent on the volume of traffic, generally requiring the contractor to perform work that would impact traffic at night and on weekends. The number of closures of NE 116th Street allowed will be restricted by the contract requirements. All closures must be approved in advance by WSDOT and the City of Kirkland, which represents local businesses. When the contractor proposes full

roadway closures, the plans are reviewed to determine if a full closure is necessary and to ensure detours are provided. In addition, liquidated damages will be assessed should the contractor exceed the number of allowable closures in the contract.

To construct the I-405 bridges over NE 116th Street it will be necessary to occasionally close NE 116th for the safety of the public. Some of the operations, including demolition, placement of girders, bridge deck concrete pours, and bridge painting, cannot be completed and safely opened up to the public within an overnight closure. During these operations, closing NE 116th Street will be necessary over weekend periods from Friday night through Monday morning. It will also be necessary, on occasion, to close the on-ramp from NE 116th Street to southbound I-405 and the off-ramp from northbound I-405 to NE 116th Street for reconstructing ramps, constructing retaining and/or sound walls, and for realigning traffic.

During these closures, signed detours will be in place and access to all properties will be maintained. Advance notice of these closures will be provided through use of email notice from the I-405 Listserve (email mailing list), advance signing, variable message signs, as well as media and highway advisory radio.

Response to Comment TT 4-3

Prior to construction, you can contact the WSDOT maintenance office to discuss landscaping for the inside of the retaining wall. It is likely that coordination can take place so that new landscaping is compatible with your landscaping.